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101st CONGRESS
2d Session

SENATE

REPORT
101-384

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1991

REPORT

[TO ACCOMPANY S. 2884]

ON

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 1991 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

TOGETHER WITH

ADDITIONAL VIEWS

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

JULY 20 (legislative day, JULY 10), 1990.—Ordered to be printed

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(101st Congress, 2d Session)

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101st Congress
2d Session

SENATE

Report
101-384

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 1991 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

July 20 (legislative day, July 10), 1990.—Ordered to be printed

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Mr. Nunn, from the Committee on Armed Services,
submitted the following

REPORT

together with

ADDITIONAL VIEWS

[To accompany S. 2884]

The Committee on Armed Services reports favorably an original bill to authorize appropriations during the fiscal year 1991 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, and for other purposes, and, recommends that the bill do pass.

PURPOSE OF THE BILL

This bill would:

(1) authorize appropriations for (a) procurement, (b) research, development, test and evaluation, (c) operation and maintenance and the revolving and management funds of the Department of Defense for fiscal year 1991;

(2) authorize the personnel end strength for each military active duty component of the Armed Forces for fiscal year 1991;

(3) authorize the personnel end strengths for the Selected Reserve of each of the reserve components of the Armed Forces for fiscal year 1991;

(4) authorize the annual average military training student loads for each of the active and reserve components of the Armed Forces for fiscal year 1991;

(5) impose certain reporting requirements;

(6) impose certain limitations with regard to specific procurement and RDT&E actions and manpower strengths; provide certain additional legislative authority, and make certain changes to existing law;

(7) authorize appropriations for military construction programs of the Department of Defense for fiscal year 1991;

(8) authorize appropriations for national security programs of the Department of Energy for fiscal year 1991; and

(9) authorize appropriations for civil defense, including programs of the Federal Emergency Management Agency, for fiscal year 1991.

AUTHORIZATION RECOMMENDATIONS IN COMMITTEE BILL

The Administration's revised request for the national defense function of the Federal budget for fiscal year 1991 was $306.9 billion, of which $228 billion is for programs which require authorization.

In March 1990, the Administration withdrew its request that $1.359 billion of the amended fiscal year 1991 request be financed by the deferral and transfer of funds appropriated to the Department of Defense in prior years. The withdrawal of this request had the effect of leaving the fiscal year 1991 request underfunded by $1.359 billion. Although this amount is not directly identified in the summary table that follows, the committee was forced to make reductions of $1.359 billion to requested programs to remain at the same overall funding level that the Administration requested.

The bill reported by the committee includes an authorization recommendation of approximately $211 billion for fiscal year 1991.

The authorization request, and thus the committee's authorization recommendation, is substantially less than the functional total for national defense. The primary reason for this difference is that, although military end strengths and pay raises require authorization, the actual funding for military pay and benefits (approximately $77 billion) is not reflected in this legislation. Programs for which authorizing legislation is required include procurement, research and development, operation and maintenance, revolving and management funds, military construction and family housing, weapons and environmental restoration programs of the Department of Energy, and civil defense.

EXPLANATION OF FUNDING SUMMARY

The following table provides a summary of both direct authorizations and related budget authority levels for fiscal year 1991 which are included in this legislation.

The columns relating to the authorization request and amounts authorized in this bill do not include funding for the following items: military personnel funding not requiring authorization; military construction authorizations granted in prior years; and other small portions of the defense function not within the authorization Jurisdiction of this committee.

All of the above amounts are included in the columns relating to the budget authority request and the implication of this bill for total defense budget authority. While the levels of authorizations and the implied budget authority in the summary table accurately reflect the committee's actions, the difference between the levels approved by the committee and the Administration request may be misleading in several accounts in the procurement, research and development, and military construction titles.

This is due to the Administration proposal to fund portions of the fiscal year 1991 request by transferring funds from prior years. While this proposal was later withdrawn, in many accounts the sum of the programs for which funds were requested were not equal to the total budget authority requested for that account because of this proposed method of financing.

The authorization request, and the amounts authorized by the committee, reflect both new authorizations and revisions to existing milestone authorizations granted in the National Defense Authorization Act for Fiscal Years 1988 and 1989.

SUMMARY OF FUNDS RECOMMENDED FOR AUTHORIZATION

	FY1991 Authorization Request	Senate Authorization	Amended FY1991 BA Request	Senate Change to Request	Budget Authority Implication
Aircraft Procurement, Army	1,567.2	857.6	1,567.2	(709.6)	857.6
Missile Procurement, Army	2,623.5	2,105.1	2,623.5	(518.4)	2,105.1
Weapons & Tracked Combat Vehicles	2,172.6	2,331.2	2,172.6	158.6	2,331.2
Procurement of Ammunition, Army	1,334.4	1,051.3	1,334.4	(283.1)	1,051.3
Other Procurement, Army	2,816.5	2,155.6	2,816.5	(660.9)	2,155.6
Aircraft Procurement, Navy	9,838.6	7,354.1	9,838.6	(2,484.5)	7,354.1
Weapons Procurement, Navy	6,147.5	5,960.7	6,147.5	(186.8)	5,960.7
Shipbuilding & Conversion, Navy	10,602.8	9,314.2	10,602.8	(1,288.6)	9,314.2
Other Procurement, Navy	6,081.5	6,055.2	6,081.5	(26.3)	6,055.2
Procurement, Marine Corps	782.1	715.1	782.1	(67.0)	715.1
Aircraft Procurement, Air Force	14,035.7	10,293.3	14,035.7	(3,742.4)	10,293.3
Missile Procurement, Air Force	8,874.7	6,749.7	8,874.7	(2,125.0)	6,749.7
Other Procurement, Air Force	8,237.4	7,526.5	8,237.4	(710.9)	7,526.5
Procurement, Defense Agencies	1,969.4	1,913.9	1,969.4	(55.5)	1,913.9
National Guard And Reserve Equipment	414.5	2,647.4	414.5	2,232.9	2,647.4
Defense Production Act Purchases	0.0		1.8	0.0	1.8
Chemical Agents & Munitions Destruction	354.4	354.4	354.4	0.0	354.4
Defense Inspector General	1.0	1.0	0.0	0.0	0.0
Total Procurement	77,853.8	67,386.4	77,854.6	(10,467.4)	67,387.2
R,D,T& E Army	6,025.9	5,746.7	6,025.9	(279.2)	5,746.7
R,D,T& E Navy	9,102.4	9,301.5	9,102.4	199.1	9,301.5
R,D,T& E Air Force	13,176.3	12,271.6	13,176.3	(904.7)	12,271.6
R,D,T& E Defense Agencies	9,228.3	8,942.7	9,228.3	(285.6)	8,942.7
Developmental Test & Evaluation	348.1	277.6	348.1	(70.5)	277.6
Operational Test & Evaluation	90.8	17.0	90.8	(73.8)	17.0
Total Research & Development	37,971.8	36,557.1	37,971.8	(1,414.7)	36,557.1

SUMMARY OF FUNDS RECOMMENDED FOR AUTHORIZATION

	FY1991 Authorization Request	Senate Authorization	Amended FY1991 BA Request	Senate Change to Request	Budget Authority Implication
Operation & Maint., Army	23,562.9	22,110.0	23,562.9	(1,452.9)	22,110.0
Operation & Maint., Navy	24,531.6	23,359.1	24,531.6	(1,172.5)	23,359.1
Operation & Maint., Marine Corps	1,948.1	1,892.7	1,948.1	(55.4)	1,892.7
Operation & Maint., Air Force	22,048.9	20,856.8	22,048.9	(1,192.1)	20,856.8
Operation & Maint., Defense Agencies	8,663.1	8,373.7	8,663.1	(289.4)	8,373.7
Office of the Inspector General	98.5	98.5	99.5	0.0	99.5
Operation & Maint., Army Reserve	890.4	886.1	890.4	(4.3)	886.1
Operation & Maint., Navy Reserve	984.6	977.8	984.6	(6.8)	977.8
Operation & Maint., Marine Corps Reserve	86.1	84.8	86.1	(1.3)	84.8
Operation & Maint., Air Force Reserve	1,042.5	1,057.6	1,042.5	15.1	1,057.6
Operation & Maint., Army National Guard	1,988.5	1,970.4	1,988.5	(18.1)	1,970.4
Operation & Maint., Air National Guard	2,175.4	2,219.6	2,175.4	44.2	2,219.6
Rifle Practice, Army	5.6	5.6	5.6	0.0	5.6
Court of Military Appeals	5.6	5.5	5.6	(0.1)	5.5
Environmental Restoration, Defense	817.0	1,017.0	817.0	200.0	1,017.0
Goodwill Games	0.0	0.0	0.0	0.0	0.0
Humanitarian Assistance	13.0	13.0	13.0	0.0	13.0
Drug Interdiction, Defense	1,207.9	1,207.9	1,207.9	0.0	1,207.9
Rest. of Rocky Mountain Arsenal	0.0		21.3	0.0	21.3
Total Operation & Maintenance	90,069.7	86,136.1	90,092.0	(3,933.6)	86,158.4
Army Stock Fund	407.0	302.5	407.0	(104.5)	302.5
Navy Stock Fund	37.2	0.0	37.2	(37.2)	0.0
Air Force Stock Fund	1,340.2	887.9	1,340.2	(452.3)	887.9
Defense Stock Fund	50.0	0.0	50.0	(50.0)	0.0
Army Industrial Fund	151.1	151.0	151.1	(0.1)	151.0
Navy Industrial Fund	238.7	238.7	238.7	0.0	238.7
Defense Industrial Fund	4.0	4.0	4.0	0.0	4.0
Natl. Defense Stockpile Transaction Fund	0.0	(100.0)	0.0	(100.0)	(100.0)
Total Revolving/Management Funds	2,228.2	1,484.1	2,228.2	(744.1)	1,484.1

SUMMARY OF FUNDS RECOMMENDED FOR AUTHORIZATION

	FY1991 Authorization Request	Senate Authorization	Amended FY1991 BA Request	Senate Change to Request	Budget Authority Implication
Total Military Personnel			79,053.7	(1,500.0)	77,553.7
Sec. 1202- Consolidation Savings	(300.0)	(300.0)	(300.0)	0.0	(300.0)
Military Construction, Army	771.7	709.9	771.7	(61.8)	709.9
Military Construction, Navy	1,097.2	1,089.1	1,097.2	(8.0)	1,089.1
Military Construction, Air Force	1,364.2	1,015.1	1,376.2	(349.1)	1,027.1
Milt. Construction, Defense Agencies	787.5	659.3	787.5	(128.2)	659.3
NATO Infrastructure	420.4	210.4	420.4	(210.0)	210.4
Milt. Construction, Army National Guard	48.4	175.9	48.4	127.6	175.9
Milt. Construction, Air National Guard	29.7	124.5	29.7	94.9	124.5
Military Construction, Army Reserve	42.6	68.8	42.6	26.2	68.8
Military Construction, Naval Reserve	50.2	67.2	50.2	17.0	67.2
Milt. Construction, Air Force Reserve	37.7	37.7	37.7	0.0	37.7
Base Realignment And Closure Account	916.5	966.5	916.5	50.0	966.5
Total Military Construction	5,566.0	5,124.6	5,578.0	(441.4)	5,136.6
Family Housing, Army	1,554.5	1,557.0	1,554.2	2.5	1,556.7
Family Housing, Navy	904.5	883.1	904.5	(21.4)	883.1
Family Housing, Air Force	971.9	961.9	971.9	(10.0)	961.9
Family Housing, Defense Agencies	21.1	21.1	21.1	0.0	21.1
Homeowners Assistance Fund	5.1	5.1	6.5	0.0	6.5
Total Family Housing	3,457.1	3,428.2	3,458.2	(28.9)	3,429.4
Total Trust Funds	0.0		73.0	0.0	73.0
Offsetting Receipts			(878.4)	0.0	(878.4)
Total DoD Military	216,846.6	199,816.5	295,131.2	(18,530.0)	276,601.1

SUMMARY OF FUNDS RECOMMENDED FOR AUTHORIZATION

	FY1991 Authorization Request	Senate Authorization	Amended FY1991 BA Request	Senate Change to Request	Budget Authority Implication
Atomic Energy Defense Activities	8,592.0	11,129.7	8,592.0	2,537.7	11,129.7
Environmental Restoration & Waste Mangt.	2,362.0	0.0	2,362.0	(2,362.0)	0.0
Defense Nuclear Facilities Safety Board	12.5	12.5	12.5	0.0	12.5
Total DOE Defense Activities	10,966.5	11,142.2	10,966.5	175.7	11,142.2
Intelligence Community Staff			28.9	0.0	28.9
Selective Service Salaries & Expenses			26.6	0.0	26.6
Ready Reserve Force			225.0	0.0	225.0
CIA Retirement			164.6	0.0	164.6
FEMA Salaries And Expenses	21.1	21.1	71.0	0.0	71.0
FEMA Emergency Mangt. Planning & Assist.	133.0	123.0	243.4	(10.0)	233.4
Total Other Defense	154.1	144.1	759.5	(10.0)	749.5
Total National Defense	227,967.2	211,102.9	306,857.2	(18,364.3)	288,492.9

EXPLANATION OF THE COMMITTEE'S RECOMMENDATIONS

The committee has reviewed the President's amended defense budget request for fiscal year 1991 in the midst of profound changes in the world. During the last year, the military threat in Europe from the Warsaw Pact has been virtually eliminated. At the same time, the tensions and open warfare that threatened Western interests in some, but not all, other regions have also abated. These changes have fundamentally altered many of the basic assumptions on which our national security policy, our military strategy, and our defense budgets have been based for the last four decades.

At the request of the Majority Leader, the Armed Services Committee began its work this year with a lengthy series of hearings on the implications of these changes for our national security. In these hearings, the committee received testimony from representatives of the U.S. intelligence community; U.S. experts outside the government; European and Japanese experts and a delegation from the North Atlantic Assembly; three former Secretaries of Defense; and three former Chairmen of the Joint Chiefs of Staff. The overwhelming consensus of these witnesses was that the world has changed dramatically, probably in permanent ways.

With these hearings as a backdrop, the committee focused its attention on the President's amended defense budget request for fiscal year 1991 and the Five Year Defense Plan. The Secretary of Defense and the Chairman of the Joint Chiefs of Staff testified on these subjects before the committee. In addition, the committee received testimony from the unified and specified combatant commanders; the Secretaries of the Military Departments; the uniformed Chiefs of each of the military Services; and the Comptroller General of the United States. Then, the subcommittees of the Armed Services Committee conducted more detailed hearings on the amended budget request. This extensive and wide-ranging review, combined with the earlier series of hearings on the implications of changes in the Soviet Union and Eastern Europe, amounted to 64 hearings with more than 220 witnesses. During this same period, the committee conducted 10 nomination hearings for senior civilian officials and military officers whose testimony concerned the pending budget request.

The committee's overall challenge was to determine whether the fiscal year 1991 defense budget and the Five Year Defense Plan respond to the changes in the threats to our national security, the political situation in the Soviet Union and Europe, and the fiscal situation in the United States. To make this determination, the committee asked three broad questions during its review:

> First, how do the recent changes in the Soviet Union and Eastern Europe affect our national interests, and how have these changes altered the traditional threats to our national security?
>
> Second, how should U.S. military strategy be revised in light of these changes in the threat to our national security?
>
> Third, how should the defense budget be changed in light of the changes in the threat and the development of a new strategy?

These three broad questions frame the linkage that the committee believes should exist among the threat, U.S. military strategy, and the defense budget.

THREAT ASSESSMENT

I. *Diminished Threat of Conventional War in Europe*

Based on the testimony during hearings this spring, the committee has concluded that the threat of a large-scale Warsaw Pact attack against Western Europe has virtually been eliminated, and the chances of any Soviet "go-it-alone" attack across Eastern Europe against the West are very remote. Any Soviet effort to reestablish a credible threat of a large-scale conventional attack on NATO would be very difficult and would require a vast and extended mobilization, thereby giving NATO many months of warning time.

Three separate factors have contributed to the virtual elimination of the threat of a large-scale Warsaw Pact attack against Western Europe:

The increase in warning time that was first recognized before 1989 and is now estimated by some senior defense officials as being as long as two years;

The Soviet and Warsaw Pact unilateral reductions begun in 1989 and scheduled for completion before 1991; and

The disintegration during the last year of the Warsaw Pact as a warfighting coalition.

In addition, the emerging NATO/Warsaw Pact arms reduction agreement on Conventional Forces in Europe (CFE) will, if successfully concluded, make the threat of a Soviet attack against Western Europe even more remote. Under this prospective accord, the Soviet Union will be required to demobilize over 300,000 soldiers and destroy tens of thousands of tanks and other weapons systems critical to offensive operations. According to Secretary of Defense Cheney, the military Services have been directed to assume a successful outcome in CFE as they prepare their portions of the Six Year Defense Plan for fiscal years 1992–1997.

II. *Changes in Soviet Naval Operations*

Changes in the Soviet conventional threat have not been confined to the European mainland. The Defense Department has reported that Soviet naval activity outside home waters has dropped by 15 percent and will continue to decline. Admiral Frank Kelso, the Chief of Naval Operations, testified that the Soviets "have decreased out-of-area operations substantially in the last few years . . . I think they pulled back to support that idea of a defensive doctrine."

III. *Continuing Conventional Strengths*

None of this is to suggest that the Soviet Union has or soon will be demoted from the superpower ranks in terms of its conventional forces. Although Soviet tank production has been cut in half, the Soviets will still turn out twice as many tanks each year as the United States. Soviet defense spending finally appears to be headed downward, but it is starting from a remarkably high level. The Director of Naval Intelligence, Rear Admiral Thomas Brooks, recently pointed out that Soviet production of new submarines, measured in tonnage, was greater last year than any year since 1980, and its production in 1989 of surface combatants, again measured in tonnage, exceeded that of any year in more than 20 years. Although the Soviet Navy has adopted a more defensively-oriented posture, its ships could again sail in the open oceans after some preparation.

IV. *Changes in Soviet Strategic Threat*

In contrast to the momentous reductions in the Soviet conventional threat, Soviet modernization of its strategic nuclear forces has tended to continue apace. As the Director of Central Intelligence, William Webster, informed the committee:

> The bulk of the evidence about Soviet strategic forces and programs shows a vigorous, broad-based modernization effort that is improving their overall strategic capabilities.

On-going deployment programs include three ICBM types, two of which are mobile, two nuclear-powered ballistic missile submarines armed with new types of MIRVed SLBMs, and two new strategic bombers. In addition, the Soviets continue to invest heavily in strategic defensive forces, including large-scale expenditures in the area of ballistic missile defense.

The Soviet strategic program is a matter of continued serious concern, and it continues to represent the paramount threat to U.S. national security. Nonetheless, in characterizing Soviet strategic programs, the Defense Department has tended to overstate its case. In contrast to statements by Secretary Cheney that there has been no change in Soviet strategic nuclear forces, CIA Director Webster testified before the committee in January 1990 that:

> *Important* changes *have occurred* in the strategic arena. (emphasis added) Last year for the first time there was a reduction in the number of Soviet strategic launchers as older systems were retired more rapidly than new ones were introduced. START force levels have become the baseline for Soviet strategic planning, and new Soviet programs have been altered accordingly.

CIA Director Webster also testified that U.S. intelligence had detected a cutback in the Blackjack bomber production "that goes beyond what is required by START." Two other recent positive developments at the strategic level that were not mentioned by Director Webster are the cessation by the Soviets of *Yankee*-class SSBN patrols off the U.S. coasts and the halting of nuclear-armed Bear-H bomber patrols to the north of Canada.

V. *Relationship Between Conventional and Strategic Threat*

The committee believes that the decrease in the Soviet conventional threat holds important implications for the Soviet strategic threat. As the likelihood of a conventional war in Europe has significantly decreased, a nuclear war originating from escalation of a European conflict has also significantly diminished. The committee agrees with the view expressed in the Joint Chiefs' 1990 Joint Military Net Assessment: "The risk of nuclear deterrence failing is assessed to be low and at this moment decreasing."

VI. *Regional Threats*

Although the dramatic events in Eastern Europe and the Soviet Union have commanded center stage over much of the last year, the status of threats to U.S. and allied security in other regions of the world should also be assessed. Foremost among these is the threat of hostilities in the Persian Gulf or elsewhere in the Middle East.

A. *Persian Gulf*

Secure Western access to Persian Gulf oil resources has been a U.S. priority since enunciation of the Carter Doctrine in 1980. Today, the economies of Western Europe and Japan remain critically dependent on this oil, and regrettably dependence by the United States has been growing in recent years.

For a decade, U.S. policy has required the armed Services to develop, train and equip forces capable of ensuring Western access to these oil resources. U.S. planning under the Carter Doctrine has focused on two separate contingencies: the first, an attempt by any indigenous nation, such as Iran, to block the sea-lanes along which travel the tankers carrying oil to the West; and second, a Soviet move into the region to seize oil fields.

From July 1987 until September 1988, the United States successfully dealt with the first contingency by deploying 16,000 military personnel and scores of naval combatants to escort tankers navigating the Gulf under the threat of Iranian mines, torpedo-boats, and anti-ship missiles. While a state of truce currently exists between Iran and Iraq, the root causes of that war have not yet begun to be resolved. Hostilities could once more flare up, again threatening Western access to these vital resources and necessitating a coordinated allied military response.

In terms of military requirements, however, the second contingency—that of a Soviet move against Iran or the oil-producing countries of the Gulf to seize oil resources—has posed far more daunting challenges to U.S. planners. For example, as conceived in the early 1980s, the Rapid Deployment Force (RDF) envisioned up to 200,000 troops and several carrier battle groups moving to the region to attempt to halt any Soviet invasion of Iran at the Zagros Mountains. The United States has never acquired capabilities sufficient to implement this strategy, but it has aimed in that direction.

At a recent hearing before the committee, General Norman Schwarzkopf, the Commander-in-Chief of the U.S. Central Command, testified that he had changed "what I considered an unrealistic strategy to a far more realistic strategy." General Schwartzkopf stated that:

> Given what had happened in Afghanistan, given what was happening all over the world, it just did not seem likely that the Soviet Union would be invading Iran any time while I was in the position of CINCCENT, or perhaps a few years after that. So I looked very hard at that situation and made a decision that I felt the real threat we would have to face over there in the near term, not the long term but the near term,

was going to be one of these regional conflicts overflowing its boundaries, just like what happened in the Iran-Iraq war.

The committee concurs with General Schwartzkopf's assessment that for the next several years, the threat of the Soviet Union moving into the Middle East or the Persian Gulf region to seize oil fields is of such low likelihood that it should not be the focus of U.S. military planning. The committee also believes that it makes no sense to imagine that the fundamentalist Moslem regime in Teheran would ask America to intervene with tens of thousands of troops or that the American people would support our doing so even if a future President were so disposed. As a result, the committee agrees that the U.S. strategy for Southwest Asia should now focus on scenarios requiring fewer forces and materiel than that particular scenario.

B. *Other Middle East Threats*

That is not to say, of course, that U.S. military force may not be required in the Middle East region. Despite decades of American diplomatic efforts to help the nations of the region conclude an enduring peace, the Arab/Israeli confrontation could at any time again escalate into open, large-scale warfare. New indigenous threats to Western access to Persian Gulf oil could emerge. Terrorist contingencies remain an ever-present danger throughout the region and elsewhere. Tensions in this region have been exacerbated not only by the growing proliferation of chemical weapons but of the means of delivering them at great ranges as well.

C. *North Korea*

In Asia, the foremost regional security threat remains North Korea. To meet this threat, South Korea has developed a large, modern military that has advanced with the country's growing economy and national budget. The committee believes that South Korea enjoys long-term advantages that will enable it to continue military improvements and continue to deter aggression. These structural advantages now make it possible for the United States to reassess the future of its military presence in South Korea. The Armed Services Committee initiated this review last year by directing the President to report to the Congress on changes that could be made in coordination with South Korea that would enable it to assume a greater role in its own defense, in addition to offsetting substantially U.S. costs associated with its Korean deployment.

D. *Pacific Region*

In contrast to the direct threat posed by North Korea to U.S. vital security interests on the Korean peninsula, a survey of the Pacific region reveals a number of continuing risks which, if not adequately managed, could in time threaten important U.S. interests. There is the risk of massive instability in the world's most populous nation, China, as its repressive government continues to resist the yearning of its people for reform; the continuing unresolved status of Taiwan; the Chinese take-over of Hong Kong; and the unsettled situation in Cambodia. Of course, there is instability in the Philippines and from time to time in Indonesia. And there is the risk of Japanese-Soviet tensions over the Northern islands, although the committee hopes that will diminish.

E. *Latin America*

With the successful conclusion of "Operation Just Cause" in Panama and the election of a democratic government in Nicaragua, the threat to peace in Central America has diminished. The restoration of democracy in those countries is only just beginning, however, and a great deal of effort and nurturing, including economic assistance, will be required. The ongoing struggles against narcotics traffickers and Marxist and other insurgencies in the Andean region still pose a major problem to democratic regimes. El Salvador is beset not only by a violent leftist insurgency but also, as is often common in such situations, human rights violations from the right. Cuba stands out as the odd-man-out in the hemisphere. Economic instability and the drug trade in the region also require urgent attention.

F. *Economic Component of Security*

Another critical dimension of the threats that the United States must confront is the economic component of national security. This threat assumes many forms. Unless there are radical changes in fiscal policy, the savings in defense that are achieved will be largely consumed by the increased interest payments required to service the growing federal debt. There is also the all-too-clear recognition that due to fiscal woes, the United States is simply failing to respond with an appropriate level of assistance to the newly-restored democracies in Eastern Europe and Central America.

As it looks to the year 2000, the committee can envision a range of other global factors which will bear on U.S. national security and well-being. The committee is particularly concerned about threats to the world's environment and has proposed a Strategic Environmental Research Program to address this problem. Other global threats include Third World debt, overpopulation, poverty and despair, the particular threats posed by radical Moslem fundamentalism, and the growing competitiveness of other industrialized nations.

KEY MILITARY MISSIONS

With an eye both to these changes in the threat environment of the 1990's and current and future constraints on defense budgets, the committee believes the following represent the key tasks which the United States should ask and expect its military forces to accomplish:

—Deter any attack on the American homeland;

—Deter the use of nuclear weapons by the Soviet Union or any other nuclear-armed adversary against the American homeland, allies, or military forces deployed in any region of the world;

—Join with U.S. allies to deter Soviet conventional aggression in Europe—at lower levels of forces as the threat decreases, and with the capability to rebuild to higher levels in time, should the Soviets attempt to re-establish a credible invasion threat;

—Help defend U.S. friends and allies in Korea, the Far East, the Middle East, Southwest Asia, and Latin America with U.S. military capabilities tailored to complement—but not substitute for or duplicate—their own military capabilities;

—Be prepared to conduct forcible entry in small- or medium-scale contingencies;

—Ensure that the sea lines of communication remain open;

—Counter drug trafficking, terrorism, and other unconventional military threats; and

—Provide accurate, timely and responsive intelligence in conjunction with other elements of the intelligence community concerning changes in the global threat environment.

ESSENTIAL ELEMENTS OF A NEW MILITARY STRATEGY

If a new military strategy is to effectively relate the country's means to the ends outlined above, the committee believes that it should be guided by five essential elements.

I. *Deterrence of Nuclear War*

Although nuclear deterrence will provide the critical underpinning of U.S. military strategy for the foreseeable future, it should be achievable at significantly lower levels of weaponry and with a much higher degree of stability (i.e., with reduced incentives for either side to strike first with strategic nuclear weapons).

This element includes two components: deterrence of a direct Soviet nuclear strike against the United States and deterrence of a Soviet use of nuclear weapons in conjunction with aggression against a U.S. ally. In addition, the United States must join with its allies and other nations, including the Soviet Union and China, to limit the proliferation of nuclear weapons and the spread of missile technology. The United States must also intensify its efforts with other nations to prevent the use of any weapon of mass destruction by any nation or terrorist group.

The emergence of newly-democratic governments in Eastern Europe; the scheduled withdrawal of Soviet forces by next summer from Hungary and Czechoslovakia and, by 1994, from the eastern portion of a unified Germany; and the likelihood of equal ceilings on tanks, artillery, aircraft, and other categories of military equipment being established in a treaty on Conventional Forces in Europe also have significant implications for the Alliance's short-range nuclear forces (SNF) and tactical air-delivered nuclear weaponry.

NATO doctrine has looked to nuclear weapons to serve three critical functions:

—First, to provide deterrence against a Soviet first-use of nuclear weapons in Europe.

—Second, to deter any massing by the enemy of its tank armies and thereby contribute to NATO's overall deterrence of conventional attack.

—Third, to compensate for conventional inadequacies should deterrence fail. Consistent with its doctrine of flexible response, NATO has maintained that any Warsaw Pact attack could be halted and the hostilities terminated at an early stage by demonstrating that the Alliance was prepared to initiate nuclear war to defend its freedom.

In a post-CFE situation of conventional parity (particularly one in which Soviet tank armies have withdrawn from Eastern Europe), NATO's reliance on the threat of an early first use of short-range nuclear weapons to deter conventional attack is no longer credible. The committee does not believe there is a role in a new military strategy for land-based nuclear weapons whose range is so limited that they could only detonate on the soil of U.S. allies or the newly emerging democracies in Eastern Europe. Ground-based nuclear missiles and nuclear artillery in Europe should be phased out, preferably pursuant to NATO and Warsaw Pact discussions and agreements.

Even if this is accomplished, however, a requirement will exist to deter Soviet use of nuclear weapons in Europe. Nuclear systems which are deployed on European soil, including the British and French nuclear forces, represent a credible retaliatory threat. Air-delivered weapons allow significantly greater flexibility for military planners, permit basing of nuclear capabilities in several NATO countries, and do not pose the significant security and political problems that accompany systems whose range is far more limited.

With these considerations in mind, the committee recommends that NATO emphasize tactical air-delivered nuclear bombs and missiles, including the Tactical Air-to-Surface Missile (TASM), and adjust its modernization and arms control planning accordingly. For purposes both of shared risks and survivability, NATO's tactical air-delivered nuclear weapons should be widely deployed at airfields throughout NATO, including in the Federal Republic of Germany.

II. *Reinforcement Strategy*

A. *Post-CFE Europe*

The committee believes that U.S. forward deployed forces should be reduced consistent with the changes in the threat; at the same time, much greater emphasis should be placed on increased specialization among allied nations and on reinforcement with deployable U.S. combat forces to support allies. At the London summit on July 5–6, 1990, NATO Heads of State agreed that: "[a]s Soviet troops leave Eastern Europe and a treaty limiting conventional armed forces is implemented, the Alliance's integrated force structure and its strategy will change fundamentally . . ." The committee believes that as NATO reviews changes in its strategy to reflect these welcome developments, it must take account of three realities:

—First, NATO's reliance on the threat of early first use of short-range nuclear weapons to deter a conventional attack is no longer credible.

—Second, NATO's assumption that the United States will maintain 195,000 troops in Central Europe is no longer realistic.

—Third, NATO's current strategy for forward defense at the inter-German border is no longer viable.

In light of future instabilities in Europe which are likely, if not inevitable, caution and prudence are clearly in order as the United States builds down its military forces in NATO. American troops in Europe can and should play a stabilizing role during this period of transition. Nevertheless, the greatly lengthened warning time of a credible Soviet conventional attack against NATO allows the United States to reduce the size of its standing armies defending well forward and to emphasize reinforcement instead.

Despite the Administration's view that 195,000 U.S. troops in Central Europe is a "floor" below which the United States cannot reduce, the committee believes that the United States must begin planning for a significantly lower level in the years ahead. It agrees with former Secretary of Defense James Schlesinger that the United States should start planning on a residual force in Europe on the order of 75,000 to 100,000 troops within 5 years.

For many years, NATO's strategy in the center region has been to defend well forward, along the West German border with East Germany and Czechoslovakia. This border has been divided into eight Corps sectors, and the ground defense of each sector has been assigned to the national forces of a single country. Within each Corps sector, logistics and support are also the sole responsibility of the country defending that sector. This is, of course, the opposite of "specialization"—because within its area of responsibility, each nation replicates virtually all of the military capabilities in the other national sectors. In addition, the traditional strategy of "defending forward" will soon be transformed by the unification of the two Germanies.

Assuming Soviet unilateral and CFE-agreed reductions are completed, the changes in both the threat and Alliance geography offer the opportunity to sharply modify the traditional concept of Corps areas of responsibility. NATO must have a new strategy, one that is developed by the Alliance as a whole. The committee urges NATO to go forward with preliminary planning for a reordering of the Alliance's conventional deployment posture: away from the current North-South oriented "layer cake" of nationally-assigned Corps areas of responsibility and toward an East-West oriented series of zones, with thin covering forces deployed forward to the East, multinational mobile response forces in the center, and national armies to the rear available on a call-up/mobilization basis.

In addition, the committee believes that the United States must insist on greater specialization of roles and missions among NATO nations. The European members of NATO should assume the primary responsibility for the initial forward ground defenses, which should be heavily anti-armor and not rely on large numbers of forward-deployed U.S. ground forces. The U.S. ground force commitment to NATO should be restructured to provide NATO's mobile strategic reserves, rather than NATO's forward defenders.

The U.S. peacetime ground presence in Europe should be largely lead elements of combat units and combat support units. These support units should include tactical planning elements, intelligence and surveillance units, command and control forces, and "reception" forces along the lines suggested by former Army Chief of Staff General "Shy" Meyer.

The United States should continue to maintain large prepositioned stocks of combat and support equipment in Europe. With these stocks in place, an initial U.S. reinforcement of NATO could be accomplished by transporting Army combat personnel from the United States to Europe, where they would break out their prepositioned combat equipment and move to reinforce NATO's ground forces.

The United States should maintain some tactical air force units in Europe for both conventional and nuclear missions, and would commit to provide significant numbers of reinforcing tactical aircraft from the United States to Europe. This pledge must be contingent on NATO providing adequate numbers of semi-hardened aircraft shelters, fuel and munitions storage, and maintenance and operations areas at co-located operating bases (COBs) in Europe.

Since U.S. ground forces in Europe would be reduced in numbers and consist mainly of combat support units, it should be possible to greatly reduce tour lengths and the number of accompanying dependents.

Finally, the United States should make a determined effort to obtain agreement from France in advance for the U.S. use of French ports, airfields, and air bases for U.S. reinforcing units in a period of emergency. No U.S. forces would need to be stationed in France in peacetime, but occasional joint exercises of reentry capability would greatly increase NATO's deterrent posture.

B. *Korea*

A continued U.S. military presence on the Korean peninsula is required to make clear to North Korea that an attack on the South will constitute an attack on the United States. U.S. capabilities to reinforce South Korea with tactical, naval and long-range air power are significant. The United States needs to continue to provide other forms of support to South Korea—intelligence; command, control and communications capabilities; and reconnaissance and surveillance capabilities.

The committee believes that U.S. ground combat forces in Korea should emphasize long-range artillery, including the Multiple Launch Rocket System (MLRS). The U.S. role should be to provide increased high-firepower support to Korean front-line defenders, with U.S. units assigned to support specific South Korean units. This augmented firepower approach should permit a significant drawdown, over time, of U.S. stationed forces in Korea.

C. *Other Areas*

In locations where the United States does not have prepositioned equipment and stationed forces, there is a broad range of contingencies to which U.S. force projection capabilities must be able to credibly respond.

Many contingencies would present threats of one sort or another to U.S. interests. Where its vital interests may be threatened, the United States needs to be capable of military intervention. But it should, whenever possible, attempt to manage the threats through diplomatic, economic and other non-military measures, with the option of increased—and increasingly visible—military presence in the area.

The United States must be capable of performing a range of force projection missions:

- —At the low end of the spectrum of operational intensity are missions whereby a U.S. "presence" is intended to deter rash actions and stabilize potential crises. Nation-building and training of foreign military forces would also be included in this category.
- —The next level of support would be for the United States to provide non-combat military support—activities like intelligence information, surveillance and warning, logistical assistance, and perhaps rear-area security.
- —Combat situations involving the U.S. military could range from firepower support of indigenous forces, from either aircraft or naval gunfire, through full-blown intervention by a U.S. expeditionary force.

Contingencies in and around the Persian Gulf, on the Arabian peninsula, and in southwest Asia are a demanding case and pose serious problems for U.S. military planners. In the not-too-distant past, conflicts have occurred between Israel and several of the Arab states, between Iran and Iraq, and in Lebanon. The United States has important security interests in Israel, Egypt, Saudi Arabia, and several of the other Gulf states. In addition, the economies of the Western world are critically linked to the free flow of oil from the Middle East producing states. The U. S. economy shares a growing dependence on Middle Eastern oil as both domestic production and that of several major hemispheric producers have begun to decline.

The Persian Gulf region is also one of the most heavily-armed regions in the world. Tanks abound; many countries have modern, high-performance tactical aircraft; and ballistic missiles are widely proliferated, including both surface-to-surface and anti-ship missiles. Any U.S. intervention in support of a friendly government must expect to encounter a high-threat environment. Our ability to provide this assistance will require an improved logistics infrastructure in the region, including prepositioned supplies and materiel.

Current U.S. capabilities for intervention at a distance, where there are few bases and a limited infrastructure, are not fully suited to U.S. needs. Today the United States has the greatest force projection capability of any country in the world. However, in general, Army light forces are rapidly deployable but lack sufficient firepower, sustainability, and ground mobility; Army heavy forces are too heavy and too slow to deploy; and in recent years, Marine Corps forces have allowed their increase in equipment to outstrip their already inadequate amphibious lift. To meet potential force projection missions, the United States must restructure its forces in accordance with the following priorities:

- —It must give priority to forces that are inherently mobile and rapidly deployable—maritime-based expeditionary forces, long-range and tactical air forces, and light combat forces that can be quickly transported using amphibious lift, sealift, and airlift assets.

—Technology must be applied so that future U.S. contingency forces have reduced weight and increased mobility, but with improved firepower and survivability.

—Special attention must be devoted to the proper mix of air, sea and amphibious lift, including fast sealift, to ensure deterrence by providing a ready capability for response to contingencies.

—The United States should continue to improve its special operations capabilities.

III. *Greater Utilization of the Reserves*

The third key element for a new military strategy is greater utilization of the reserves. In this period of increased warning time and fiscal austerity, the United States must conduct a fundamental reexamination of the use of the reserves in the military Services. This will be a difficult challenge for the military Services, but one which must be addressed.

There are some areas in which entire missions can be transferred to Reserve components. As a corollary, active duty personnel have to be more involved in the reserves. The United States must also be prepared to use the existing authority to call up reserve units at early stages of potential crises if this element of the strategy is to be successful.

For the Army, the much longer warning time of conventional conflict in Europe increasingly allows the heavy armor mission to be shifted to the Reserve components. Army Guard and Reserve units should be designed to be capable of reaching full combat readiness within a scheduled period ranging from weeks to months of a mobilization decision, all well within the available warning times, and matched to available lift and the pace of the Soviet build-up.

The Air Force has been a leader in the effective utilization of its reserve components. The Air National Guard and Air Force Reserve already make substantial contributions to the overall Air Force missions. Even greater use of the Air reserve components can be made in the areas of strategic and tactical airlift, close air support, and air forces oriented toward a major contingency in Europe. This might require increased assignment of active pilots to expanded reserve squadrons.

With the scaling back of Soviet Navy out-of-area operations and other changes in the threat, the U.S. Navy policy that virtually all deployable ships have to either be at sea or be able to get underway within days becomes increasingly unnecessary and unaffordable. The Navy must get more serious about the use of reserves to handle a portion of the Navy's fleet.

Funds will no longer be available to support all of the Navy's fleet at the operational tempos of the Cold War. Thus, the Navy will be faced with choosing between reduced operational tempos, including more ships in reserve status, or a much smaller, all-active Navy. The Navy will have to find innovative ways of managing a reserve-dominated operation for a larger portion of the current fleet. This is not to suggest that all categories of Navy ships and aircraft could be transferred into the Navy Reserve; aircraft carriers and submarines, for example, would probably not be suitable for reserve operation. However, ships or aircraft involved in sealift, anti-submarine warfare, or sea lane protection missions for NATO all lend themselves to increased use of reserves.

Additionally, regional combatant commanders need to take a closer look at the requirements for carrier battle groups, so as not to place excessive at-sea demands on the balance of the active Navy. It is clear that in many instances, an entire carrier battle group is not needed to "show the flag"; ships other than aircraft carriers and their escorts can perform this mission. Thus, there needs to be a reexamination of the presence mission, a recalculation of the size of a battle group when warranted, and an emphasis on the concept of ships operating independently of a carrier battle group. By making these adjustments and by expanded use of reserves, the committee believes that the Navy can meet future requirements with between 10 to 12 carrier battle groups.

IV. *Flexible Readiness*

The fourth essential element of a new strategy is "flexible readiness"—the adjustment of the readiness status of various forces based on the threat; the amount of warning time; the likelihood these forces will go into action; and the ability to transport them to the battle. In practical terms, the Military Departments currently utilize a form of flexible readiness. The units that would be the "first to fight" are the first to be equipped with the newest hardware and are manned at the highest levels. Other units, not designated for early deployment, have older equipment and are normally manned at less than full strength.

The reduction in the conventional threat and the severe fiscal pressures mean that the size of all of the military Services will decrease. But the Services face an important choice in how much their forces will decrease:

1. They can have a relatively larger force structure, but with the readiness of those forces based on the threat, the warning time, the likelihood of use, and the ability to get to the battle.
2. If the Services are reluctant to move in this direction, they will face a substantially smaller force structure than is currently being discussed in the Defense Department.

Under the preferred alternative of flexible readiness, the military Services would keep certain high priority forces, such as strategic forces, expeditionary forces, forward deployed forces, special operations forces, and selected intelligence units, at a high state of readiness. Forces that are not in the high readiness category could be sustained at adjusted readiness levels. More importantly, they should be maintained so that their readiness can be quickly increased if major changes in the threat are observed.

Those military forces that are best suited for the kinds of threats that are most likely in coming years would be kept at high readiness levels. Those forces oriented to counter less likely threats—such as a major conventional land battle in Europe against Soviet forces—could be retained in the force structure but at readiness levels tailored to the substantially longer warning time of any increase in the threat.

A carefully planned flexible readiness approach will not produce a hollow military. Serious morale problems resulted in the 1970s because many units were told they had to be ready to carry out their mission in a matter of days, but they knew they were not staffed, equipped, or trained to do it. Morale problems will not exist if military personnel in selected units understand that their mission is to get ready to mobilize and rapidly increase combat capability rather than to face an immediate deployment time. In other words, their mission is to "be ready to get ready".

The Defense Department will need to recommend a course of action to the Congress soon. The committee's preference is to maintain a larger force under the flexible readiness concept. It believes that this option best matches U.S. force structure to the most likely threats, within the resources that will be available.

V. *Resource Strategy—"Think Smarter, Not Richer"*

The fifth, and final element, of a new military strategy involves fundamental changes in the way defense resources are currently managed. In the phrase suggested by former Ambassador David Abshire, "think smarter, not richer." For example, the Defense Department must return to the principle of "flying before buying." In too many cases, the development, testing, and production of weapons systems have overlapped, only to have to spend large amounts of money to make weapons work right after they are in the field. There are real concerns about the concurrency—research and development on weapons already in production—on a number of major weapons acquisition programs. With the changes in the threat, the Defense Department can take the time to get it right the first time.

Reduced ownership costs for maintenance, logistics, manpower, and support must be emphasized in the design of new weapons systems. The argument should not be over whether new technologies should be applied—they must. The real challenge is to utilize technology not just for sophistication but also for affordability and maintainability. Greater emphasis must also be placed on the improvement of existing platforms and systems, since fewer new starts will be affordable in the future.

The United States must put more emphasis on innovative concepts in its research and development efforts to maintain technological superiority. This applies particularly to systems and capabilities that offer the prospect of "breakthrough" or "leapfrogging" capabilities. Finally, it must move aggressively to preserve and maintain a viable defense industrial base. This will be particularly important and challenging as the overall level of defense spending—and future defense investment—is adjusted over the next 5 years.

COMMITTEE'S RECOMMENDATIONS ON THE AMENDED BUDGET REQUEST

The specific budgetary adjustments that the committee recommends for the fiscal year 1991 defense budget flow directly from the five essential elements of the new military strategy that it is proposing in this report. To the maximum extent possible, the committee considered the long-term budgetary implications of its recommendations. Unfortunately, it was very difficult to assess these implications because the Department of Defense has not submitted a Five Year Defense Plan to accompany the amended budget request for fiscal year 1991. Despite the absence of this important planning tool, the committee evaluated its budgetary adjustments in light of its understanding of the long-term trends in the threat, U.S. military strategy, and defense spending.

The committee believes that the level of funding authorized in the bill is appropriate based on the changes in the threat, a revised military strategy, and a responsible and manageable glide path to a smaller defense establishment over the next five years.

I. *Maintain Nuclear Deterrence at Lower Levels and with Greater Stability*

The first theme that guided the committee's budget review was the need to maintain nuclear deterrence with forces lower in level and more stable in structure than those currently proposed at the START negotiations.

The committee eliminated the procurement in fiscal year 1991 of Rail Garrison MX trains, a reduction of $1.346 billion, in order to permit adequate testing of the concept, while awaiting further decisions by the Administration on the scope and pace of ICBM modernization. The committee fully funded the R&D request for both the Rail Garrison MX and the Small ICBM programs.

The committee also approved the revised request for the B-2 bomber program following Secretary Cheney's major aircraft review. The reduction from five to two B-2s will permit additional testing to be completed prior to a decision to go to rate production. The committee also fully funded the request for the SRAM II strategic bomber weapon and the Tactical Air to Surface Missile (TASM), which will provide an important short-range nuclear capability.

The committee authorized the 18th Trident submarine but, in light of uncertainties about future force structures under START, denied advance procurement funding for additional Trident submarines beyond the 18th.

After careful consideration and extended debate, the committee concluded that the Milstar strategic C^3 satellite system should be terminated, and that a cheaper, less capable alternative should be developed. This recommendation would result in savings of $1.1 billion in fiscal year 1991. In taking this decision, the committee noted that over $40 billion was invested in improving strategic communications during the 1980s and that strategic C^3 is robust, even without the Milstar satellite program.

The committee reduced the funding request for the Strategic Defense Initiative (SDI) by $972 million (DoD and DoE activities) and expressed its continuing concern that the imposition of an arbitrary 1993 deadline for making a deployment decision appears to be leading to an excessive concentration on work on a Phase I SDI system at the expense of research on the long-term "exotic" systems that might lead to highly effective defenses.

Consistent with recent decisions by the Administration, the committee also terminated development of the Follow-On-To-Lance short-range nuclear missile and further engineering development and production of all binary chemical weapons. Savings of almost $300 million would result from these recommendations in fiscal year 1991.

II. *Emphasize a Reinforcement Strategy*

The second theme around which the committee's budget review was organized was a reinforcement strategy by which the United States would reduce its forward-deployed forces, encourage specialization among allied nations, and emphasize a reinforcement capability, including the use of reserves to augment the remaining forward-deployed forces.

1. *Reductions of Overseas Forces*

Secretary of Defense Cheney has directed the military Services to assume in their planning for fiscal years 1992–1997 that NATO and the Warsaw Pact will successfully conclude a treaty on Conventional Forces in Europe (CFE) establishing a ceiling of 225,000 on the number of U.S. troops permanently stationed ashore in Europe. To put the United States on an orderly course toward, first, the CFE ceiling, and second, subsequent reductions below the 225,000 level, the committee lowered the statutory ceiling on U.S. troops in Europe from 311,855 to 261,855 (a reduction of 50,000), effective September 30, 1991. The committee authorized the President to waive this lower ceiling if he certified that it would be in the national interest to do so.

2. *Emphasis on Lighter, More Lethal Forces*

U.S.military planning during the past 40 years has emphasized combat systems designed to fight against a numerically-superior, increasingly capable Soviet/Warsaw Pact conventional threat. That threat scenario led the military Services to develop increasingly expensive, sophisticated, and heavy combat equipment. The Services—especially the Army and the Marine Corps—have become too heavy and cumbersome to transport. The committee concluded that the Services need to promote research and development to field lighter, more lethal combat forces. To do so, the committee recommended:

—Armored gun system: The committee learned that the Army had to borrow light armored vehicles for use in Operation Just Cause in Panama. The committee required the Army to proceed with the procurement of an off-the-shelf light armored gun system for its light infantry forces.

—Special operations forces: In response to some of the lessons learned in Operation Just Cause, the committee authorized a package of $113.3 million in additional funding for various special operations improvements. These include better ammunition for the AC–130 gunship aircraft, a refueling capability for HC–130 tanker aircraft, and new equipment for Army Rangers.

—Soldier/Marine enhancement program: Last year, the committee initiated a program to test and evaluate off-the-shelf equipment that might be procured to improve the effectiveness and lessen the logistics burdens on infantrymen. The committee was gratified by the progress that has been made in this program in fiscal year 1990, and authorized $30 million to continue the program in fiscal year 1991.

—Logistics burdens: The committee noted that there is virtually no research and development activity in the Department of Defense to reduce weight and logistics burdens for existing weapon systems. The committee chartered the Secretary of Defense to undertake studies and analyses in this area.

—Multi-purpose weapon system: The committee recommended $13 million for the Army to initiate full-scale development of the light multi-purpose munition program.

3. *Emphasis on Mobility Forces*

Mobility forces are a key component in a strategy that emphasizes the ability to reinforce allies where needed or to deploy forces to areas where forcible entry is required. The committee continued research and development on the C–17 program but delayed its procurement due to excessive concurrency. The committee authorized $960 million for one amphibious assault ship and $240 million for an amphibious cargo ship. In addition, it approved an additional $30 million to continue the important research and development work on fast sealift alternatives that it initiated last year. To determine the appropriate mix of airlift, sealift, amphibious lift, and pre-positioning capability, the committee also directed the Defense Department to update the analysis in the 1981 Congressionally Mandated Mobility Study.

4. *Retire Older, Single Purpose Combat Systems*

The committee examined the older items of equipment that are earmarked for retirement near the end of the current Five Year Defense Plan. Accelerating their retirement would produce substantial savings in modification costs, operating and support costs, and military personnel costs in fiscal year 1991. Therefore, the committee recommended reductions totaling $294.3 million to the amended budget request based on the assumption that the military Services will begin the retirement of older equipment in fiscal year 1991.

III. *Utilize the Reserves More*

Another theme that guided the committee's work was greater utilization of the reserves. The committee recommended a comprehensive set of proposals to strengthen the Reserve and National Guard components. These proposals fall into the general categories of force structure, management of reserve forces, and general modernization.

The amended defense budget request reflects a "share the pain" approach in which the military Services have simply cut back their reserve forces in proportion to their reductions in their active duty forces. The committee disagrees with this approach. As a result, the committee froze the reserve force structure at current levels; required the Military Departments to undertake a 5-year plan to strengthen reserve units and balance them with the capabilities and resources of active duty units; and directed increased Reserve component participation in certain mission areas.

To improve the management of reserve forces, the committee believes that the Active and Reserve components must be better integrated. To that end, the committee recommended a 3-year phased process of introducing active duty personnel into reserve forces to replace the current dependence on full-time reservists.

In a significant effort to strengthen the reserves' combat capability, the committee approved a total of $2.6 billion in equipment for the Reserve and National Guard components. This total constitutes an addition of $878.4 million to the amount included in the amended defense budget request.

IV. *Apply Flexible Readiness*

The fourth theme of the committee's budget review is the concept of flexible readiness—high readiness for certain forces and adjustable readiness for others.

The committee reduced the overall budget request for training and operating tempo for the Army, Navy and Air Force by approximately $400 million. The changes in the threat and the increase in warning time justify this savings. This reduction should not be implemented across the board by the military Services. The committee directed the Secretary of Defense to insure that high priority forces, such as strategic forces, expeditionary forces, forward deployed forces, special operations forces, and certain intelligence forces, are maintained at high readiness levels. Training and operating tempo for lower priority forces can be reduced based on the reduced threat and the increased warning time to prepare for contingencies or deployment.

To maintain combat proficiency at flexible readiness levels and reduced operational tempos, the committee sponsored an initiative to expand the use of advanced simulators to improve proficiency training. Advanced simulation technology offers the possibility of conducting simulations on the very equipment that will be used in wartime, especially in the area of command and control. The committee authorized an increase of $171 million to the budget request for several advanced simulation programs to enhance the military Services' ability to simulate realistic combat and organizational training.

V. *"Think Smarter. Not Richer"*

The final theme around which the committee's review was organized was the need for a stable, effective resource strategy. In the face of a shrinking defense budget, it is essential to stabilize long-term budgets and to squeeze the maximum amount of defense capability out of each dollar invested. The committee's approach to the management of scarce defense resources is captured by the phrase suggested by former Ambassador David Abshire: "think smarter, not richer."

1. *Simplify Defense Acquisition*

Two key elements of this strategy are streamlining and simplification of the defense acquisition process and improvements in the quality of the acquisition workforce. After a careful review of Secretary Cheney's Defense Management Report, the committee took positive action on 24 of its 30 acquisition policy and acquisition workforce proposals.

The committee authorized DoD to create a pilot program to test innovative strategies for streamlining the acquisition of major defense systems. The Defense Department would be allowed to test simplified acquisition procedures, waiving current paperwork requirements, on six major acquisition programs selected by DoD and approved by the Congress. The committee gave further impetus to the Department's goal of simplifying the acquisition process by promoting the use of commercial, or "off-the-shelf", products, without the use of complex military specifications or burdensome procurement procedures. As a means of further reducing administrative requirements, the committee raised the threshold for mandatory submission of cost and pricing data from $100,000 to $500,000, a measure designed to broaden the defense industrial base by removing a disincentive that inhibits commercial-sector firms from entering the defense industrial base.

Multiyear procurement is a proven acquisition strategy that can produce significant savings when properly utilized in stable, low-risk programs. To expand the potential for savings, the committee eliminated the current requirement that savings exceed a specific statutory threshold before a program may be funded on a multiyear basis.

The success of defense acquisition reforms rests largely on the quality of the acquisition workforce. The committee approved a number of initiatives to enhance the government's ability to attract and retain quality personnel.

2. *"Fly Before Buy"*

The Packard Commission recommended that the Defense Department return to the concept of "fly before buy." The reduction in the Soviet/Warsaw Pact threat means that DoD does not have to rush to buy a weapon in order to meet an arbitrary fielding deadline. The Pentagon can now afford to take the time to get it right the first time before becoming deeply committed to troubled weapon systems.

The committee applied this "fly before buy" approach to the following major weapon systems:

—B-2 bomber: The committee approved the revised request for only 2 aircraft so that additional testing could be completed before a production decision is made. (savings of $888 million)

—V-22 tiltrotor aircraft: The committee added $238 million to continue flight testing but did not commit to procurement pending resolution of difficulties uncovered in flight testing.

—Light helicopter (LH): The committee directed the Army not to enter full-scale development, but instead to develop and fly a prototype before commiting to full-scale development. (savings of $150 million)

—A-12 aircraft: The committee eliminated $1.5 billion in procurement funds because recent program difficulties have resulted in excessive concurrency. (savings of $1.5 billion)

—Advanced Tactical Fighter (ATF): The committee directed the Air Force not to enter full-scale development, but instead to continue the flying prototype phase after completion of the current competition. The committee also preserved an F-15 alternative to the ATF program. (savings of $177 million)

—AMRAAM Missile: The committee reduced the amended budget request by $500 million and limited production in fiscal year 1991 to the current production rate until reliability problems are resolved. (savings of $500 million)

—SSN-21 *Seawolf* attack submarine: The committee deferred procurement in fiscal year 1991 in light of the concurrency in the program, and substituted two SSN-688 Los Angeles class submarines in order to preserve the industrial base and modernize submarine forces. (net savings of $1.5 billion)

—C-17 aircraft: Further examination led the committee to conclude that the Air Force should not purchase any C-17 aircraft in fiscal year 1991 because of delays in the manufacture and testing of the first two aircraft. The committee insisted that the Air Force continue to operate under its performance-based contract award concept. (savings of $1.8 billion)

—Family of Heavy Tactical Vehicles: Operational testing during the competition for the Army's new heavy tactical vehicle revealed serious reliability shortcomings. The committee reduced the funding by $43 million and required the Army to insure that the reliability problems are fixed before production begins. (savings of $43 million)

—Rail Garrison MX missile: The Committee concluded that there was excessive concurrency in the Rail Garrison MX program and removed all funds to procure trains in fiscal year 1991. (savings of $1.3 billion)

3. *Emphasize Product Improvements Over New Starts*

As the defense budget is reduced, the committee believes that it is imperative that the Defense Department improve existing weapon systems where possible before it commits to replace them with new and more expensive weapons. The committee recommended the following opportunities to improve existing weapons:

—F-15XX aircraft: The committee concluded that the Major Aircraft Review failed to examine all alternatives to the Air Force's Advanced Tactical Fighter (ATF). The committee added $100 million to protect an option to proceed with an upgraded F-15 as an alternative to the ATF.

—AH-64 helicopter improvements: The committee added $18 million to study improvements to the AH-64 and AHIP helicopters as alternatives should the Army's new Light Helicopter be terminated.

—M-1 tank: The committee did not recommend further production of M-1 tanks, but instead recommended $149 million for the Army to initiate a program to upgrade the first generation M-1 tanks. The Army's analysis indicated this upgrade program would improve the combat capability of first generation M-1 tanks by 250 percent.

—Phoenix missile: The committee approved $60 million for a product improvement to existing Phoenix air-to-air missiles that will substantially improve their range and effectiveness.

—A-6 aircraft: The committee accelerated block improvements to the A-6 attack aircraft to improve their reliability and combat effectiveness. (addition of $85 million)

—C-130J aircraft: The committee noted that the Military Airlift Command had previously examined product improvements to the C-130 fleet, but had not requested funds for those improvements. The Air Force has no plans to modernize tactical airlift aircraft. Consequently, the committee recommended $10 million for the initiation of a block upgrade program for tactical transport aircraft.

4. *Maintain Technological Superiority*

The committee paid particular attention to supporting programs that enhance the Nation's technological superiority. The committee increased funding for the defense technology base by over 5 percent from the amount available to the Department of Defense for fiscal year 1990. The committee also increased funding of the Department's advanced technology programs by over 6 percent from the 1990 funding level. This increased support for these research and technology programs will, in addition to providing the foundation for the next generation of new weapons, directly feed product improvements to existing weapons.

In its review of the amended defense budget request, the committee carefully examined the Department's support of the critical technologies identified in the Critical Technologies Plan submitted to the Congress in March 1990. As a result, the committee added $30 million to the amount requested by the administration for high performance computing in fiscal year 1991. The committee also increased funding for several other critical technology areas, including air-breathing propulsion, micro-electronics, photonics, and advanced materials.

The committee recommended several provisions intended to improve the manufacturing processes used to fabricate, assemble, and test weapon systems. Funding for the Department's manufacturing technology (MANTECH) program was restored to the fiscal year 1990 level. In addition, the fiber metal matrix composites model factory program, the rapid acquisition of manufactured parts program, and the National Center for Manufacturing Sciences were all funded above the administration's request.

The committee developed a strong package of provisions that would support better science and engineering education at all levels and make several important improvements in the operation of the Defense Department's in-house laboratories and the Energy Department's national laboratories. The committee also initiated a new program, with $100 million in funding, to permit the Defense Advanced Research Projects Agency (DARPA) to participate actively in consortia that promote cooperative research and development of critical generic technologies.

5. *Streamline Headquarters*

The committee's streamlining initiatives, the Defense Management Review process, and the significant force level reductions mandated by the committee also create a vital opportunity to consolidate and rationalize acquisition, intelligence, and headquarters functions. Accordingly, the committee mandated a 20 percent reduction in the acquisition workforce and in all headquarters functions over the next 5 years. The committee also directed that the number of personnel in intelligence-related organizations be reduced by 25 percent over a 5-year period, beginning in fiscal year 1992. These reductions will provide a significant opportunity to eliminate unnecessary positions. By phasing in the reductions over a 5-year period, the committee structured them in an orderly fashion that will minimize disruption of essential functions.

6. *Reduce Micromanagement*

As part of its continuing commitment to reduce congressional micromanagement of defense programs, the committee repealed 73 recurring reports that are required by law from the Defense Department. It also reduced the frequency and administrative burden of an additional 10 reports. The repealed or modified reports constitute about 40 percent of the total number of recurring defense reports within the committee's jurisdiction.

MINIMIZE THE EFFECTS OF THE DEFENSE TRANSITION

A. *Military Personnel*

One of the committee's highest priorities was to sustain and, where possible, enhance the management and combat effectiveness of military personnel as the military Services build down over the next 5 years. With this concern in mind, the committee approved a plan of gradually declining manpower levels that would be accompanied by a package of compensation benefits for personnel who may be involuntarily separated.

An important element of this plan would be an active duty end strength level for fiscal year 1995 that is based on the reduced threat and the resulting mission and force structure changes that each military Service is expected to make over the next 5 years. The committee set this level for fiscal year 1995 at 1,602,000 personnel, which is 22.8 percent below the level authorized for fiscal year 1990. The committee provided a specific end strength for each Service. To put the military Services on a responsible glide path to achieve this target, the committee established an active duty end strength level of 1,976,405 for fiscal year 1991.

The committee approved an orderly, regulated process for the military Services to follow in managing their manpower down to the fiscal year 1995 level. In particular, the Services would have to, in the following order, reduce new accessions, retire senior grade personnel, and release junior first-term personnel before making any reductions in mid-career personnel. In the event that these actions require involuntary separations, the committee recommended a generous package of benefits, such as higher involuntary separation pay for both officers and enlisted personnel, medical coverage, and unemployment compensation.

B. *The Defense Base Structure*

With a substantially reduced force structure, the committee anticipates a significant number of base closures and reductions, both in the United States and overseas. To expedite these adjustments, the committee approved several provisions to streamline the base closure process, including establishing a separate base closure account, delegating property disposal responsibilities to the Secretary of Defense, and narrowing the applicability of the National Environmental Policy Act to base closure actions. The committee also provided the Defense Department financial incentives to dispose of excess bases and unneeded parcels of land, and, where operationally compatible, to jointly use military installations to meet other national priorities such as civil aviation, substance abuse treatment, and prisons.

Finally, in order to respond to the local economic effects caused by the closure of military bases and the reduction or termination of defense contracts, the committee substantially increased the funding and staffing of the Office of Economic Adjustment. In addition, the committee expanded economic planning assistance to make it available to those communities which are substantially affected by these changes in defense activity.

Program Terminations

Secretary Cheney terminated 13 programs, and the committee agreed with him on 11 of those programs. The committee also terminated the following 15 additional programs:

	Terminated Program	FY1991 Savings (BA in millions of $)
1.	Milstar satellite	$1,063
2.	National Aerospace Plane (DoD participation)	158
3.	Air Force Over-the-Horizon Backscatter radar	265
4.	Nuclear, biological, and chemical reconnaissance vehicle	37
5.	Follow-On-To-Lance missile	112
6.	155mm nuclear artillery shell	(classified)
7.	155mm binary chemical shell	74
8.	MLRS binary chemical munition	28
9.	Navy Bigeye chemical bomb	9
10.	Air Force Bigeye chemical bomb	58
11.	ADATS air defense system	438
12.	Small unit support vehicle	27
13.	Armored combat earthmover	44
14.	Battlegroup Passive Horizon Extension System	(classified)
15.	Plutonium Recovery Modification Project	65
	TOTAL	$2,350

The outyear savings that result from these additional program terminations are more than $45 billion.

DoD and DoE Environmental Activities

The committee established a Strategic Environmental Research Program to utilize the existing resources, talent, and technologies at the Department of Defense, the Department of Energy (DoE), and the intelligence community to confront the massive environmental problems facing our nation and the world today. This program will (1) identify and declassify a wide range of data gathered by the defense community for use by civilian scientists for research on global climate change; (2) identify existing defense research programs utilizing advanced energy technologies that can be further developed for use by DoD, DoE, and the public to conserve non-renewable sources of energy and to reduce harmful atmospheric emissions; and (3) conduct research to develop new environmental cleanup technologies that can assist DoD and DoE in their cleanup efforts. The committee authorized $200 million for the Strategic Environmental Research Program in fiscal year 1991.

To ensure that the Defense and Energy Departments are conducting environmental cleanup activities in a timely fashion, the committee added $383 million for DoE environmental restoration and waste cleanup activities and $250 million for cleanup at DoD facilities. Of this amount for military facilities, $50 million is for extra cleanup assistance at bases that will be closed.

OPTIONS CONSIDERED BY THE COMMITTEE FOR DEEPER OUTLAY REDUCTIONS IN NATIONAL DEFENSE SPENDING IN FISCAL YEAR 1991

During the course of the committee's review of the amended fiscal year 1991 defense authorization request, the committee considered and found unacceptable several alternative options for reducing National Defense budget authority and outlays below the level contained in the committee bill to the level of budget authority and outlays recommended by the Senate Budget Committee. The committee concluded that there is a mismatch between the budget authority and outlay targets in the Budget Resolution reported by the Senate Budget Committee. The options considered by the committee are described briefly below. These options demonstrate that there is no acceptable way to reduce defense programs in fiscal year 1991 to meet both the budget authority and outlay targets in the Senate Budget Committee recommendation.

Option 1—Deeper Reductions in Personnel and Readiness Accounts

The first option cut deeply in the personnel and operation and maintenance (O&M) accounts because these are the areas of the defense budget with the highest first-year outlay rate. Reductions in these accounts produce immediate outlay savings with the lowest possible budget authority reduction.

This option included all of the reductions in the committee bill *plus* additional reductions of $3.3 billion in budget authority and $3.0 billion in outlays.

As the following table shows, this option met both the budget authority and outlay targets of the fiscal year 1991 Budget Resolution reported by the Senate Budget Committee.

Reductions from the FY1991 Budget Request
($ in billions)

	Budget Authority (BA)	Outlays (O)
Committee bill	-18.1	-6.9
Additional cuts	-3.3	-3.0
Total	-21.4	-9.9
Senate Budget Committee Targets	-21.3	-9.9

The additional reductions to the committee-reported bill required under this option would be:

	($ in millions)	
	BA	O
Military personnel:		
Reduce military pay raise to 3.0%	-300	-285
Stop enlistment/reenlistment bonus	-300	-285
Reduce overseas station allowances	-300	-285
Reduce clothing allowances	-100	-95
Reduce variable housing allowances	-200	-190
Cut an additional 185,000 active duty personnel below the 100,000 reduction in the committee bill	-1,100	-1,045
Operation and maintenance:		
Cut back real property maintenance	-150	-116
Cut military training/education	-50	-39
Reduce DoD civilian personnel by additional 15,000	-250	-193
Reduce operating tempo of military Services by 10-15%	-550	-424
Total	-3,300	-2,957

Impact of Additional Cuts

The committee found these additional reductions unacceptable because they would:

(1) cause very deep and disruptive cuts in military manpower, resulting in the involuntary separation of 185,000 military personnel;

(2) reduce the projected military pay raise from 3.5% to 3.0%, putting military pay even further behind comparable private sector pay;

(3) make it impossible for the military Services to recruit and retain certain critical skills by terminating all enlistment and reenlistment bonuses for hard-to-fill skills; and

(4) cut back training and operating tempo of almost all military units, leading to reduced readiness.

Option 2—Deeper Reductions in Investment (Procurement and Research and Development) Accounts

The second option reversed the emphasis on the fast-spending accounts in Option 1. This option protected the personnel and operation and maintenance accounts from reductions beyond those contained in the committee bill. This meant that all of the additional reductions had to be made in the slower-spending procurement and research and development accounts.

This option included all of the reductions in the committee bill *plus* additional reductions of $24.7 billion in budget authority to meet $3.1 billion in outlay reductions.

As the following table shows, this option meets the outlay target of the fiscal year 1991 Budget Resolution reported by the Senate Budget Committee, but exceeds the recommended budget authority reduction by $21.5 billion.

Reductions from the FY1991 Budget Request
($ in billions)

	Budget Authority	Outlays
Committee bill	-18.1	-6.9
Additional cuts	-24.7	-3.1
Total	-42.8	-10.0
Senate Budget Committee Targets	-21.3	-9.9

The additional reductions required by this option are summarized in the following table.

OPTION 2
($ in millions)

			Additional Reduction	
	FY1991 Request	Committee Reduction	Budget Authority	Outlays
Terminate the following Procurement programs				
B-2 Procurement/adv proc/spares	$3,868	-1112	-2756	-149
C-17 procurement	$1,704	-1404	-300	-16
Trident submarine	$1,245	0	-1245	-50
Trident II missile	$1,344	0	-1344	-121
MX Missile	$673	0	-673	-139
M-1 Tank	$747	0	-747	-7
Bradley Fighting Vehicle	$688	0	-688	-7
F-15 fighter	$1,751	0	-1751	-95
F-16 fighter	$2,357	-432	-1925	-104
F-14 Remanufacture program	$997	1	-998	-135
F-18 fighter	$1,894	-585	-1309	-177
AV-8B	$535	-17	-518	-70
KC-135 Reengining	$632	-60	-572	-31
DDG-51	$3,569	-30	-3539	-142
Enterprise FY1990 funds	$1,000	0	-1000	-170
Patriot air defense missile	$883	0	-883	-44
AMRAAM (Navy/AF)	$1,315	-500	-815	-168
Tanker Transport Trainer System	$261	22	-283	-15
Tomahawk cruise missile	$809	-146	-663	-60
Cut back or terminate the following Research and Development programs				
Terminate Advanced Tactical Fighter	$1,047	-177	-847	-434
Rail Garrison R&D	$548	0	-100	-51
Terminate Midgetman	$202	0	-202	-103
SDI (DoD + DOE)	$4,652	-972	-1000	-512
C-17 R&D	$541	0	-100	-51
Terminate the V-22	$0	238	-100	-56
Terminate LHX	$411	-150	-261	-133
SSN-21 and BSY-2 R&D	$534	0	-100	-56
Total Major Programs ($ in millions)		-5324	-24719	-3095

Impact of Additional Cuts

The committee found these additional reductions unacceptable because they would:

(1) terminate all of the major aircraft, ship, missile, and combat vehicle procurement programs of the military Services;

(2) cut deeply into major defense research and development programs for the next generation of weapons systems; and

(3) eliminate current and future modernization of the military Services' combat capability.

Option 3—Illustrative Mix of Reductions Suggested by the Senate Budget Committee

During the committee's consideration of the bill, the committee received a letter from the Senate Budget Committee outlining an account-level allocation to meet the budget authority and outlay targets of the fiscal year 1991 Budget Resolution reported to the Senate.

($ in millions)

	Budget Authority	Outlays
Reductions by Committee	-18.1	-6.9
Additional reductions required to meet Senate Budget Committee allocation	-3.3	-2.9
Total	-21.4	-9.8
Senate Budget Committee Targets	-21.3	-9.9

The changes necessary to bring the reductions in the committee reported bill in line with the Senate Budget Committee allocation are outlined in the following table.

OPTION 3: ADDITIONAL REDUCTIONS NEEDED TO REACH PROPOSED SENATE BUDGET COMMITTEE ALLOCATIONS

($ in Millions)

			Additional Reductions to meet Budget Committee Allocations			
	Bush Request	Armed Services Committee Action	BA Change	Outlay Change	Total Reductions BA	Total Reductions 0
Military Personnel	$79,054	-1500	0	0	-1500	-1430
Operation & Maintenance	$90,092	-3900	-2000	-1550	-5900	-4560
Procurement	$77,855	-10400	+2600	+410	-7800	-1220
Research & Development	$37,972	-1400	-2200	-1140	-3600	-1860
Military Construction	$5,578	-400	-1200	-250	-1600	-340
Family Housing	$3,458	-30	-270	-170	-300	-180
Stock Funds	$2,228	-650	+150	+60	-500	-200
Total DoD	$295,131	-18280	-2920	-2640	-21200	-9790
Dept. of Energy	$10,967	+175	-275	-180	-100	-70
Other	$760	-10	+10			
Total National Defense	$306,857	-18115	-3185	-2820	-21300	-9860

COMPARISON OF ARMED SERVICES COMMITTEE BILL AND BUDGET COMMITTEE ALLOCATION

The committee found the reduction allocation proposed by the Senate Budget Committee unacceptable because it would have forced the committee to cut much more deeply in readiness-related operation and maintenance funding and in research, development and testing of future weapons systems, while adding back funds in the procurement accounts that would have made deficit reduction efforts more difficult in future years.

For example:

—Both the Armed Services Committee bill and Budget Committee allocation have the same level of military personnel cuts.

—The Senate Budget Committee allocation cuts much deeper in the readiness-related operation and maintenance accounts than the committee bill. The committee bill already puts the military Services on the path toward flexible readiness by reducing operating tempo and training for lower priority units. The Senate Budget Committee allocation would cut 50 percent more in the O&M accounts than the committee bill. This reduction would require deeper and unacceptable cuts in DoD civilian personnel; in the training and operating tempo of the military Services; in the maintenance of equipment and facilities; and in base operations support.

—The Senate Budget Committee allocation would add back $2.6 billion to the Armed Services Committee's procurement recommendations. This would increase the bow wave of future outlays and make it more difficult to meet declining budget targets in future years. It could also result in funding weapons systems which are not ready for production or which are not needed by the military services.

—The Senate Budget Committee allocation would reduce research and development programs by $2.2 billion below the Armed Services Committee bill. This reduction would reverse the Committee's emphasis on "fly before buy", which calls for greater research and testing of new weapons before committing to production. It would also mean short-changing critical research on leading-edge technologies.

—The Senate Budget Committee allocation calls for reductions in military construction funding which is three times greater than the reduction in the Armed Services Committee bill. The committee bill denies authorization for three-quarters of the funding for overseas military construction projects in the fiscal year 1991 budget request. The level of reductions proposed by the Senate Budget Committee would result in the cancellation or deferral of a large number of military construction projects in the United States.

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATION

TITLE I—PROCUREMENT

The recommendations of the committee for the procurement of various defense weapons and equipment appear in this title of the report.

EXPLANATION OF TABLES

The tables in this title display items requested by the administration for fiscal year 1991 for which the committee either increased or decreased the requested amounts. Items that are not displayed have been approved by the committee in the amounts requested in the Department of Defense's amended budget justification documents. As in the past, the administration may not exceed the amounts approved by the committee (as set forth in the tables or, if unchanged from the administration's request, as set forth in the Defense Department's amended budget justification documents), without a reprogramming action in accordance with established procedures.

CONSOLIDATION OF GUARD AND RESERVE PROCUREMENT

The committee has consolidated all of the procurement funding requested by the Department of Defense for the components of the National Guard and Reserves in the Guard and Reserve procurement account. Approximately $1.3 billion of this funding has been transferred from the accounts of the active forces. Those transfers are identified in the relevant accounts as "Guard and Reserve Equipment Consolidation". The Department of Defense is directed to transfer all items identified for the Guard and Reserves in the P-1R budget justification document into the Guard and Reserve procurement account.

PRODUCTION CAPACITY AND EFFICIENT PRODUCTION RATES FOR NEW WEAPON SYSTEMS

Historically, the Military Departments have started major new weapon systems with unrealistic assumptions about annual production rates. The Services have projected lower unit costs for weapon systems than were achieved by assuming that they would be produced at high production rates. Program managers would buy the production capacity needed to produce weapons at those unrealistic rates that were never achieved. Subsequent budget pressure would hold down production rates to a much lower, inefficient percentage of that capacity, resulting in high overhead rates and soaring unit costs. Forced optimism at the outset of a program always returns to haunt procurement later when programs enter a negative spiral of higher unit costs and shrinking annual buys.

Systematically, the Services have started more programs than they can afford to buy because they assumed these unrealistically high production rates and artificially low per-unit costs. Year-by-year, production rates across the board are lowered because of funding limitations, and program costs increase.

The Secretary's recent Major Aircraft Review did not come to grips with this critical problem. It is imperative that the Department adopt realistic production rate assumptions at the outset of a program so that it does not initiate the pattern of optimistic assumptions, excess capacity, stretchouts, and soaring unit costs.

Therefore, the committee believes the Secretary of Defense must conduct a thorough review of the production capacity assumptions for all major acquisition programs. The committee directs the Secretary of Defense to issue a directive on production capacity guidelines for major acquisition systems that have not yet entered production. The guidelines should outline the historic relationship between production capacity and annual production rates, and direct the program managers to identify the cost implications of producing the new weapon systems at inefficient production rates.

RETIRING OBSOLETE FORCE STRUCTURE

As noted in the section of this report entitled "Explanation of the Committee's Recommendations," the committee believes the Department of Defense should accelerate the deactivation or retirement of obsolete weapon systems starting in fiscal year 1991. The committee believes the Department needs to make the final determination of which systems should be retired and which kept operational.

Anticipating those deactivations, the committee recommends a 40 percent reduction or $194.3 million in the request of $485.8 million for modifications to the following weapon systems:

Army:
- —OV-1 aircraft
- —RC-12 aircraft
- —RU-21 aircraft
- —AH-1S helicopter
- —OH-58 helicopter
- —UH-1 helicopter

Navy/Marine Corps:
- —A-3 aircraft
- —A-4 aircraft
- —A-7 aircraft
- —F-4 aircraft
- —RF-4 aircraft
- —F-5 aircraft
- —OV-10 aircraft
- —H-1 helicopter
- —H-2 helicopter
- —H-3 helicopter

Air Force:
- —A-7 aircraft
- —A-10 aircraft
- —F/RF-4 aircraft
- —F-111 aircraft
- —T/AT-37 aircraft
- —T-38 aircraft
- —T-41 aircraft
- —other aircraft

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	ARMY PROCUREMENT CHANGES						
	AIRCRAFT PROCUREMENT						
1	GRISLY HUNTER (TIARA)	1	10,430	(1)	(10,430)		
2	RC-12H/K RECON AIRPLANE (TIARA)	5	87,407		(25,000)	5	62,407
6	UH-60 BLACKHAWK (MYP)	72	272,118	(24)	(156,000)	48	116,118
14	CH-47 CARGO HELICOPTER (MODS) (MYP)		237,761		(141,061)		96,700
16	OH-58 MODS		24,695		(4,200)		20,495
19	AHIP		47,993		(34,800)		13,193
	RETIREMENT OF OBSOLETE AIRCRAFT				(40,400)		(40,400)
29	AIRBORNE COMMAND & CONTROL CONSOLES				7,800		7,800
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(321,500)		(321,500)
	TOTAL AIRCRAFT PROCUREMENT ARMY		1,583,200		(725,591)		857,609
	MISSILE PROCUREMENT						
2	ADS HVY MSL SYSTEM	220	235,584	(220)	(235,584)		
2a	ADATS PRIOR YEAR SAVINGS			(110)	(167,176)		(167,176)
3	ADATS ADVANCE PROCUREMENT (CY)		36,200		(36,200)		
6	PATRIOT(MYP)	817	883,152		(92,400)	817	790,752
11	LASER HELLFIRE SYSTEM	3,002	123,279		(17,000)	3,002	106,279
13	TOW 2	13,284	219,465		(40,000)	13,284	179,465
14	MULTIPLE LAUNCH ROCKET SYSTEM (MYP)	24,000	313,915	12,000	70,000	36,000	383,915
	TOTAL MISSILE PROCUREMENT ARMY		2,623,500		(518,360)		2,105,140

P-1		Amended		-----Senate------		-----Senate------	
		FY 1991 Request		Change to Request		Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount
	WEAPONS & TRACKED COMBAT VEHICLES						
8	M1 ABRAMS TANK SERIES (MYP)	225	747,324		60,000	225	807,324
13	M1 ABRAMS TANK (MOD)		80,137		149,000		229,137
20	PRODUCTION BASE SUPPORT (TCV-WTCV)		83,166		(62,600)		20,566
25	GRENADE LAUNCHER, AUTO, 40MM, MK19-3			820	12,300	820	12,300
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(100)		(100)
	TOTAL WEAPONS & TRACKED COMBAT VEHICLES		2,172,600		158,600		2,331,200
	AMMUNITION						
3	PROJ, 155MM, BINARY CHEMICAL, M687		74,303		(74,303)		
21	CTG, TANK, 105MM, TP-T, M490A1	45	8,738		14,300	45	23,038
22	CTG, TANK, 105MM, DS-TP, M724A1	34	6,511		16,600	34	23,111
25	CLASSIFIED PROJECT		[ ]		[10,000]		[ ]
38	PROJ, ARTY, 155MM, BASEBURNER M864	138	118,514	(103)	(88,514)	35	30,000
39	PROJ, ARTILLERY, 155MM, TRNG, M804	203	32,557	(203)	(32,557)		
49a	MOUT FUZE				2,000		2,000
62	DEMOLITION MUNITIONS, ALL TYPES		5,621		(1,000)		4,621
64	GRENADES, ALL TYPES		7,961		(6,600)		1,361
65	SIGNALS, ALL TYPES		2,718		(1,400)		1,318
66	SIMULATORS, ALL TYPES		10,197		(1,000)		9,197
69	ITEMS LESS THAN $2 MILLION		4,181		(1,400)		2,781
76	PROVISION OF INDUSTRIAL FACILITIES		134,647		(50,000)		84,647
999	CLASSIFIED PROGRAMS		140,004		10,000		150,004
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(159,200)		(159,200)
	TOTAL AMMUNITION, ARMY		1,424,400		(373,074)		1,051,326

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	OTHER PROCUREMENT						
8	SMALL UNIT SUPPORT VEHICLE (SUSV)	157	27,031	(157)	(27,031)		
13	FAMILY OF HEAVY TACTICAL VEH (MYP)	494	150,576		(43,297)	494	107,279
44	SINCGARS FAMILY		311,325		(25,000)		286,325
74	GENERAL DEFENSE INTELL PROGRAM (GDIP)		29,728		(1,093)		28,635
75	ALL SOURCE ANALYSIS SYS (ASAS) (TIARA)		59,338		(47,500)		11,838
117	INTEGRATED FAMILY OF TEST EQUIP (IFTE)		33,587		(10,000)		23,587
	MILSTAR REDUCTION				(600)		(600)
125	SPECIAL PROGRAMS		139,662		(139,662)		
132	RECON SYSTEM, NBC	15	36,914		(36,914)	15	
140	M-9 ARMORED COMBAT EARTHMOVER (ACE)	132	59,852	(97)	(43,900)	35	15,952
160	SWA PETROLEUM DISTRIBUTION SYSTEM		56,156		(26,000)		30,156
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(270,900)		(270,900)
	TOTAL OTHER PROCUREMENT ARMY		2,827,500		(671,897)		2,155,603

MATCHING ARMY PROCUREMENT PLANS TO LOWER INVENTORY GOALS

Many of the Army's procurement plans were established several years ago at a time when the Army was projecting a stable force structure consisting of 28 active and reserve component divisions. During the past year, the Army has commenced planning to undertake a substantial restructuring of its force structure in light of diminished requirements for heavy armored forces. The Department of Defense has confirmed that at least five and as many as seven heavy armored divisions will be inactivated over the next 5 years.

The procurement requests for many individual items, especially for heavy forces, have not been adjusted to reflect this reduced force structure. Consequently, the committee recommends an authorization for the items listed below based on the revised force structure currently projected by the Army.

Item	Request	Recommendation
M9 combat earthmover	59.9 m.	16.0 m.
Integrated Family of Test Equipment	33.6 m.	23.6 m.
Patriot Missile (FY 1990 savings)	883.2 m.	790.8 m.

GRISLY HUNTER

The amended budget request includes $10.4 million to procure a so-called Grisly Hunter aircraft, which is fitted with equipment for special operations. Last year, the Congress expressed reservations over the program in terms of cost, schedule, and testing. Subsequently, the Army adopted new mission requirements and objectives. However, the amended budget request does not conform to these new objectives. The committee supports the overall mission goals of the Grisly Hunter program, but cannot endorse a program with such programmatic uncertainty. Consequently, the committee recommends that no funds be provided for the Grisly Hunter program in fiscal year 1991. The committee would welcome a reprogramming for the program once the Grisly Hunter program is given a solid foundation in terms of requirements and acquisition strategy.

AIRBORNE COMMAND AND CONTROL CONSOLE

U.S. operations in Grenada demonstrated serious communications interoperability problems. In response, the Army initiated a program to install special command and control consoles in selected helicopters. These consoles were fitted with the various combat radio systems currently in operation so that a battlefield commander could contact all forces in a joint operation. The system was used successfully in Panama.

The amended budget request contains no funds for the consoles. Because of their demonstrated utility, the committee recommends an authorization of $7.8 million to procure the consoles in fiscal year 1991.

AIR DEFENSE HEAVY MISSILE SYSTEM

The amended budget request includes $235.6 million to procure 220 Air Defense Heavy Missile System missiles and 16 launchers in fiscal year 1991. The budget also contains $36.2 million for advance procurement for fiscal year 1992.

Following the termination of the Division Air Defense (DIVAD) program, the Congress directed the Army to initiate the Air Defense Heavy Missile System by testing alternative existing weapons. To insure that the winning system would perform as promised, the Army conducted extensive tests during the last year. In general terms, those tests have shown that when the system is functioning properly, it performs quite well. But the system also suffers from continuing, serious reliability and maintenance problems.

The Army has advised the committee that these problems will require a redesign and revalidation of the system and that procurement should be delayed by at least 2 years. The Army has requested $190 million in R&D funds just to evaluate the contractor's progress and performance.

The Air Defense Heavy Missile System is being procured to defend heavy armored forces in intense land combat against numerically superior Warsaw Pact forces. Under the Army's revised acquisition profile, fire units will not be fielded until the middle of the decade, at the same time that U.S. Army divisions are being removed.

Because of the serious reliability problems, the substantial reduction in the threat, and the questionable affordability of a $7 billion program, the committee has concluded that it is imprudent to spend over $190 million for test and evaluation for a system that has questionable utility once it is fielded in the middle of the decade. Consequently, the committee believes that it is prudent to terminate the program.

The committee also believes that much less expensive alternatives are available. The committee recommends an authorization of $30.0 million to install an upgraded Pedestal Mounted Stinger fire unit in an armored vehicle and test its utility along with other emerging interceptor missiles as a replacement for the Air Defense Heavy Missile system.

The committee remains convinced that the forward area air defense (FAAD) command and control program is critical to the operation of all the other components of the FAAD system and encourages the Army to place increased emphasis on development of the FAAD command and control program to facilitate fielding concurrent with missile firing systems.

TOW MISSILE

Although the committee encourages any use of second sourcing, where this can be shown to produce significant savings to the taxpayer, it is concerned that the Department of Defense continues to use second sources in circumstances where, as a result of cutbacks in total requirements, it is not cost-effective to facilitize and use a second source. As noted elsewhere in this report, the committee recommends a change in current law to make it clear that second sourcing is required only when it is cost-effective.

In many cases, such as the TOW anti-tank guided weapon system, the supposed savings from such activities have proved to be based on unrealistic requirements that are never funded, and on estimates of savings which either do not materialize or are based on unrealistic estimates of the total cost of facilitization and start-up costs required for second sources and competition. In the case of the TOW, for example, the Army has requested $40 million to set up a second source producer, while the current producer has sufficient capacity to produce three times as many missiles per year than the Army plans to buy.

The committee directs that the Army review its decision to seek a second source for TOW, and that the Department of Defense should only use such second sourcing for the TOW when a comprehensive cost-benefit analysis demonstrates that savings will occur, even in the event of reasonably forseeable reductions in requirements. Such analysis must take into account all facilitization and related costs to the Government.

MULTIPLE LAUNCH ROCKET SYSTEM

The amended budget request includes $313.9 million to procure 73 launchers and 24,000 rockets in fiscal year 1991 for the Multiple Launch Rocket System (MLRS). The MLRS system is capable of delivering enormous firepower while requiring far less manpower than conventional artillery systems. Further, the MLRS rockets are being fitted with precision submunitions to enhance their effectiveness against armored targets. In short, the MLRS system represents an extremely effective weapon system that will increase in importance as the United States withdraws maneuver combat units from Europe.

The MLRS system is especially important in Korea where important South Korean cities and military installations are within range of North Korean artillery. MLRS was designed to rapidly suppress enemy artillery and is very well suited to this purpose in Korea.

Last year, the Army proposed to stretch out the production rate on MLRS rockets from 48,000 a year to 24,000. The Congress rejected that proposal and increased funding in fiscal year 1990 to procure 48,000 rockets. The Army has again proposed to stretch-out the production rate to 24,000, which is an inefficient rate for the current facilities. Because of the priority for the MLRS system and the inefficiencies in the budget request, the committee recommends an increased authorization of $70 million to procure an additional 12,000 rockets. The committee also directs the Army to revise its reporting procedures by including the launcher in the Weapons and Tracked Combat Vehicle appropriation, but continuing to include the rockets in the missile appropriation.

The United States has made a priority of sharing MLRS technology with allies. Currently, the MLRS system is scheduled to be procured by several allies. The committee believes that the MLRS system is especially important in Korea and believes the administration should encourage the South Korean Government to procure the MLRS system to complement U.S. capabilities.

M2 FIGHTING VEHICLE

Two years ago, the Congress authorized the Army to enter into a 5-year multiyear contract for 3,000 M2 vehicles with an annual procurement of 600. Last year, the Army notified the Congress that it had reduced its requirement to 2,400 and would enter into a 4-year multiyear contract at 600 a year. Congress approved that plan last year and provided sufficient funds to procure 600 in fiscal year 1990 under the terms of a multiyear contract.

The amended budget submission includes funds for 600 vehicles. Subsequent to the submission of the budget request, however, the Army decided to terminate production of M2 fighting vehicles after only 1,200 are produced. The Army suggested that the 600 provided last year, when combined with the request of 600 in fiscal year 1991, would be sufficient if procured under the terms of a 4-year multiyear contract, with 400 in fiscal year 1990, 300 each in fiscal years 1991 and 1992, and 200 in fiscal year 1993.

The budget request, however, is insufficient to purchase the vehicles in that manner, and the Department of Defense reprogrammed $85 million from the fiscal year 1990 appropriation, leaving the overall program underfunded by over $250 million.

The committee expresses its frustration with the Army over the M2 program. It has consistently approved the Army's plans, only to have them subsequently changed. The committee also expresses reservations over the Army's plans to terminate production after 1,200 additional vehicles. This decision places at risk several important combat vehicle programs that utilize the M2 chassis.

The committee is concerned about the Army's recent decision to replace the six Cavalry Fighting Vehicles (CFC) with 10 high mobility multipurpose wheeled vehicles (HMMWV) in the scout platoons of tank and mechanized infantry battalions. The committee notes that the HMMWV offers little protection against indirect artillery fire and recalls the Army's arguments that the long-range direct fire suppression provided by the Bushmaster cannon and the armor protection of the CFC are extremely important to the operational tactics of these scout platoons.

Consequently, the committee directs the Army to develop a 4-year multiyear contract for 1,600 vehicles, with an annual production rate of 400 vehicles.

M1 TANK

The amended budget request includes $747.3 million to procure 225 M1 tanks in fiscal year 1991. The Defense Department proposes that this represent the end of the M1 tank program, with the tank plants inactivated at the conclusion of the fiscal year 1991 funded delivery period.

The Army made this recommendation for several reasons. First, because of the reduction in the number of Army tank battalions as force structure declines, all remaining tank battalions in the Active and Reserve components will be outfitted with M1 tanks. Second, the Army's overall budget resources do not permit continued production of tanks. Finally, the Army has indicated it believes that the M1 tank cannot meet projected future threat requirements and that an entirely new tank needs to be developed.

The committee understands the Army's reasons, but believes that it has ignored several considerations which are important at this critical point of transition. First, termination of the M1 production program represents effectively the dismantling of the tank industry. Unlike other DoD programs such as combat aircraft or naval ships, there are no remaining production programs that will keep the tank industry together in coming years. When the M1 production line ends, the industry ends. Army witnesses indicated that it will cost an estimated $2.4 billion to inactivate the current tank industry and rebuild it 6 to 8 years from now to initiate production of a follow-on tank.

Second, the Army's budget proposes a distorted modernization plan that poses serious risk to the future of armored combat. The Army's plans effectively end all near term modernization in order to invest completely in a next-generation tank. The Army has not been able to demonstrate why the threat posed by the Soviet Union is so low now that it can forgo any tank production at all, while the long term threat is so high that it must spend $4 billion to develop a new tank that won't be available until the turn of the century. Why will the United States ever build a new tank if it can live without continued production of the M1 tank?

Third, while tank warfare with the Warsaw Pact appears unlikely at the present, it is important to note that there are several countries in the so-called "third world" which have more tanks in their armies today than Nazi Germany had when it invaded the Soviet Union during World War II. And those tanks represent third- and fourth-generation tanks equal in capability to the M1 tank. This threat may not necessitate continued production of M1 tanks, but it does necessitate ongoing modernization of the M1 fleet.

Fourth, the Army's decision to terminate the M1 undermines several important foreign military sales agreements. Both Egypt and Saudi Arabia have signed contracts to procure the M1 tank. Those contracts involve tens of thousands of man-years of U.S. employment which will be lost if the M1 tank program is discontinued. There are also several potential FMS contracts which will be lost if the tank program is terminated.

The committee understands that the Army has sufficient numbers of tanks to satisfy inventory requirements, including the requirements of the National Guard and Army Reserve. But the committee also understands that it will be possible to sustain a tank industry through a major modification program. Such a modification program—upgrading older, tactically obsolete M1 tanks into improved configurations—would sustain the key elements of the tank industry, would provide cost-effective improvements to a proven platform, and would sustain the base needed to support foreign military sales. Finally, such a modification program would become a bridge for the industrial base until a new-design tank can enter production.

The Army has testified that it supports such a program and is currently working to develop the necessary details. Consequently, the committee recommends an authorization of $149.0 million to initiate the modification program. The analysis provided to the committee by the Army indicates that upgrading the first generation 105mm M1 tanks is at least twice as cost-effective as upgrading M1A1 tanks into the "block 2" configuration. The committee recommends this approach for maximizing the combat potential of the M1 fleet while sustaining the production base.

The committee also understands that it is possible to build as many as 120 block 2 tanks in fiscal year 1991 instead of 66 as requested by the Army. The committee recommends an increased authorization of $60 million to cover the added costs of the additional block 2 tanks. The committee also believes that M1A2 tanks should be placed into high-priority Army units as soon as possible.

The budget request also contained $62.6 million to inactivate the Detroit Army Tank Plant and to move the tools and equipment to the Lima Army Tank Plant. It makes no sense to spend these funds to move them to a plant that will be mothballed before the tools can even be delivered. Therefore, the committee recommends a deletion of those termination funds.

M1 TANK ENGINE PROCUREMENT

The committee understands that the Army is examining a proposal to procure AGT–1500 tank engines under terms of a multiyear contract. The proposal would initiate the multiyear contract with engines authorized and appropriated in fiscal year 1990.

The committee encourages the Army to evaluate the proposal to determine the extent to which such an approach might produce savings to the Army while at the same time preserving important components of the tank industrial base.

MARK–19 GRENADE LAUNCHER

The Army initiated a multiyear contract for the Mark–19 grenade launcher in fiscal year 1987. At that time, the Army stated that its requirements for the weapon system exceeded 13,900. The amended budget request for fiscal year 1991 would terminate the 5-year multiyear contract at the end of the third year after only 4,102 weapons had been procured.

The Army has testified that the reduction is due to budget cuts and pending force structure reductions. Yet according to Army documents, the revised force structure would still require 11,095 weapons. Therefore, it is clear that the major reason for the huge reduction in procurement is affordability.

The Mark–19 grenade launcher has proven to be an extremely effective weapon system, especially for light forces. The committee believes it is important to provide this direct fire suppression capability to more of the Army's combat, combat support, and combat service support units. Therefore, the committee recommends an authorization of $12.3 million for 820 weapons in fiscal year 1991. The Army is encouraged to complete the multiyear contract by buying an additional 1,000 weapons in both fiscal years 1992 and 1993. Even at this level, the Army will have less than half of its requirements.

ARMY AMMUNITION

The committee recommends an increase of $42.9 million for four high priority ammunition programs identified by the Army. These increases are summarized below:

Change to fiscal year 1991 Request

Item:	Millions
CTG, Tank, 105mm, TP-T, M490A1	+$14.3
CTG, Tank, 105mm, DS-TP, M724A1	+ 16.6
Classified	+ 10.0
MOUT Fuze	+ 2.0
Total	+$42.9

In addition, the committee recommends reductions totaling $182.5 million to eight programs based on revised requirements, technical problems, and other program execution considerations. These adjustments are summarized below:

PBOJ, ARTY, 155mm, Baseburner M864	-$88.5
PROJ, ARTY, 155mm, TRNG, M804	- 32.6
Grenade, L8A3	- 6.6
M185 Distress Signal	- 1.4
9mm ball cartridge	- 1.4
M24 simulator	- 1.0
35mm training rocket	- 1.0
Provision of industrial facilities	- 50.0
Total	-$182.5

SMALL UNIT SUPPORT VEHICLE

The amended budget request included $27.0 million to procure 157 small unit support vehicles (SUSV). Last year, the Congress approved the Defense Department's request for $28.4 million to procure 192 vehicles. In addition, the Congress provided an additional $29.2 million over last year's requested level to complete the SUSV program. The Army has been unable to explain why additional vehicles are required, since the Army indicated the additional funding last year completed procurement for a 26 division Army, and the Army in the future will be substantially smaller. Consequently, the committee does not recommend an authorization of SUSV vehicles in fiscal year 1991.

FAMILY OF HEAVY TACTICAL VEHICLES

The amended budget request includes $150.6 million to procure heavy tactical trucks in fiscal year 1991. During the past 2 years, the Army has conducted a competitive evaluation of trucks derived from existing commercial and military vehicles. The Army recently selected the best design.

The extensive testing undertaken during the competition revealed serious reliability problems with the trucks of all the competitors. While the committee strongly supports the program, it is imperative that those reliability problems be fixed and demonstrated before procurement can begin. For all practical purposes, this means the Army will not be able to obligate the funds provided in fiscal year 1990 for the program. Were those funds rescinded, however, the Army would not be able to initiate contractual actions with the winning contractor to fix the problems and test production quality vehicles. Consequently, the committee recommends a reduction in the program of $43.3 million in fiscal year 1991, equal to the funds provided in fiscal year 1990. This approach permits the Army to proceed with the contract, but by first fixing and testing the winning design to ensure that it meets reliability standards.

JOINT TACTICAL FUSION

For the past decade, the Army and Air Force have been jointly developing a new tactical intelligence system that will bring together the inputs of various sources of information and combine them to develop tactical intelligence using advanced artificial intelligence computer programming. The amended budget request contains $59.3 million for procurement of the Army's All Source Analysis System (ASAS). The budget also contains funds to continue the development of the Air Force's counterpart system, the Enemy Situation Correlation Element (ENSCE).

The committee has concluded that procurement of the ASAS system is premature in that it has undergone no effective operational testing. Further, the Army's plan acknowledges that the system to be procured in fiscal year 1991 will contain substandard software. Consequently, the committee recommends an authorization of only $11.8 million in fiscal year 1991.

The committee also understands that the Air Force has decided to terminate its participation in the program. As a result, the committee recommends that no funds be provided for continuing research and development in fiscal year 1991 for the program.

SOUTHWEST ASIA PETROLEUM DISTRIBUTION SYSTEM

The amended budget request included $56.2 million to procure two bulk petroleum distribution equipment sets to support contingency operations in Southwest Asia. The administration has lowered the priority of the Southwest Asian contingency in its planning. Consequently, the committee believes that this program should be reduced. The committee recommends an authorization of $30.2 million to procure one petroleum distribution system in fiscal year 1991.

P-1		Amended FY 1991 Request		-----Senate------ Change to Request		-----Senate------ Authorization	
LINE	ITEM	Quantity	Amount	Quantity	Amount	Quantity	Amount
	NAVY PROCUREMENT CHANGES						
	AIRCRAFT PROCUREMENT						
6	AV-8B (V/STOL)HARRIER (MYP)	24	457,286		(17,000)	24	440,286
8	F-14A/D/REMFG (FIGHTER) TOMCAT	12	779,946		1,000	12	780,946
10	F/A-18 (FIGHTER) HORNET	66	1,894,123	(24)	(584,600)	42	1,309,523
11	F-18 ADVANCE PROCUREMENT (CY)		150,832		(54,800)		96,032
12	CH/MH-53E (HELCOPTER) SUPER STALLION	23	376,915	(23)	(376,915)		
13	CH/MH-53 ADVANCE PROCUREMENT (CY)		57,845		(22,845)		35,000
22	E-2C (EARLY WARNING) HAWKEYE	6	350,914		46,500	6	397,414
25	T-45TS (TRAINER) GOSHAWK	12	261,000		21,800	12	282,800
29	A-3 SERIES		102		(102)		
31	A-6 SERIES		84,093		85,000		169,093
39	ES-3 SERIES		5,163		(5,163)		
49	EP-3 SERIES		22,423		(22,423)		
50	P-3 SERIES		248,191		(6,148)		242,043
65	SPARES AND REPAIR PARTS		1,288,542		42,000		1,330,542
66	COMMON GROUND EQUIPMENT		434,304		30,600		464,904
67	AIRCRAFT INDUSTRIAL FACILITIES		36,034		(6,000)		30,034
	RETIREMENT OF OBSOLETE AIRCRAFT				(39,300)		(39,300)
999	CLASSIFIED PROGRAMS		1,501,859		(1,501,859)		
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(74,200)		(74,200)
	TOTAL AIRCRAFT PROCUREMENT NAVY		9,838,600		(2,484,455)		7,354,145

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	WEAPONS PROCUREMENT						
6	TOMAHAWK	600	808,733	(200)	(146,163)	400	662,570
9	AMRAAM	550	421,916	(100)	(70,000)	450	351,916
25	SIDEWINDER MODS		7,076		(7,076)		
26	PHOENIX MODS		3,809		60,000		63,809
30	WEAPONS INDUSTRIAL FACILITIES		24,986		13,100		38,086
64	BIGEYE CHEMICAL WEAPON		8,911		(8,911)		
68	16 INCH GUN AMMUNITION		33,022		(33,022)		
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(8,600)		(8,600)
	TOTAL WEAPONS PROCUREMENT NAVY		6,161,400		(200,672)		5,960,728
	SHIPBUILDING AND CONVERSION						
2	TRIDENT ADVANCE PROCUREMENT (CY)		143,000		(143,000)		
	TRIDENT PRIOR YEAR SAVINGS				(181,000)		(181,000)
3	SSN-688 CLASS SUBMARINE (NUCLEAR)			2	1,805,000	2	1,805,000
5	SSN-21	2	2,342,900	(2)	(2,192,900)		150,000
6	SSN-21 ADVANCE PROCUREMENT (CY)		1,139,100		(1,139,100)		
10	DDG-51 (MYP)	5	3,566,403		(30,000)	5	3,536,403
	TOTAL SHIPBUILDING AND CONVERSION		11,195,200		(1,881,000)		9,314,200

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	OTHER PROCUREMENT NAVY						
121	OVER THE HORIZON RADAR	1	80,558	(1)	(80,558)		
182a	SONOBUOYS				87,000		87,000
285	TRAINING DEVICE MODIFICATIONS		38,659		12,000		50,659
289	INTELLIGENCE SUPPORT EQUIPMENT		45,349		(500)		44,849
299	SPARES AND REPAIR PARTS		521,678		(8,000)		513,678
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(36,200)		(36,200)
	TOTAL OTHER PROCUREMENT NAVY		6,081,500		(26,258)		6,055,242
	MARINE CORPS PROCUREMENT						
21	155MM M864 PROJ BASEBURNER		6,161		(6,161)		
36	M-1 A1 MAIN BATTLE TANK (MYP) FY1990			[22]	[62,400]		
37	M-1 ADVANCE PROCUREMENT (CY) FY1990				[-62,400]		
66	TACTICAL AIR OPER MODULE (TAOM)	6	47,422	(2)	(15,800)	4	31,622
122a	REDUCTION TO ENGINEERING/OTHER SUPPORT EQ				(10,000)		(10,000)
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(35,000)		(35,000)
	TOTAL PROCUREMENT MARINE CORPS		782,100		(66,961)		715,139

A-12 ATTACK AIRCRAFT

The amended budget request contained funds to continue procurement of the new generation A-12 attack aircraft for the Navy. This would represent the second year of production funds for the A-12 program. The aircraft procured in fiscal year 1990 are required for operational test and evaluation. As such, the aircraft proposed for procurement in fiscal year 1991 represent the functional start of procurement for fielding the A-12 aircraft.

The A-12 aircraft is experiencing technical difficulties. It is projected to exceed its weight limits substantially. While it is still projected to perform essential requirements adequately, the weight problems seriously limit future growth opportunities and provide an insufficient margin for corrective action should additional complications arise.

In the course of the Major Aircraft Review, the Navy and the contractors have determined that the technical difficulties will result in a delay in first flight and initial development and operational testing. This delay in testing will produce unacceptable concurrency in the program, especially in light of the continuing technical difficulties. The committee strongly supports the A-12 program, but also believes that this is a prime example of the need to "fly before buy" in the acquisition process. Consequently, the committee recommends a reduction in funding of $1,500.0 million in fiscal year 1991.

The committee is concerned about the current status of the existing fixed price contracts. The committee notes that the Deputy Secretary and Under Secretary of Defense for Acquisition, as well as the current Navy leadership, have rejected fixed price development contracts for precisely the reasons illustrated by the A-12's problems. The committee does not believe that preserving production options under the current contract by approving substantial increases in A-12 funding should override the need to insure that the system meets technical and cost specifications. The committee cautions the Navy that the committee expects the contractor to deliver a product that meets contractually specified requirements at no additional cost to the Government.

After the Navy has insured that the contractor will meet contractually specified requirements, the Navy is encouraged to submit a request to transfer such funds as are required to protect production contract options.

AIRBORNE SELF-PROTECTION JAMMER

The amended budget request includes a total of $161 million to continue procurement of the Airborne Self-Protection Jammer (ASPJ) for the Navy, although the Air Force is no longer participating in the formerly joint program.

The committee is aware that following a production verification phase the Navy intends to incorporate ASPJ in AV-8B, F-14, and F-18 aircraft. The committee, however, is concerned about committing to this large expenditure program which possesses considerable risk in achieving acceptable levels of performance.

Accordingly, the committee defers all production funding for the ASPJ program for fiscal year 1991, but authorizes $48 million of non-recurring funding in order to protect the manufacturing base and encourage additional performance verification. The committee also recommends an increased authorization of $6.5 million (PE 0604270) to accelerate operational testing of this system.

F/A-18 STRIKE FIGHTER

The amended budget request includes $1,894.1 million to procure 66 F/A-18 aircraft in fiscal year 1991, and $150.8 million for advance procurement for 66 aircraft in fiscal year 1992.

For three reasons, the committee believes this request is excessive. First, the Navy currently has more F/A-18 aircraft than are required for today's force structure.

Second, since the budget was submitted, the Secretary of Defense has indicated that the Navy is likely to reduce the number of deployable carriers and air wings. In addition, Marine Corps force structure is also likely to be reduced in coming years.

Third, and perhaps of greatest significance, for years the Navy and the Marine Corps have procured redundant capability in the area of strike fighters. Both the Navy and the Marine Corps have squadrons of F/A-18 strike fighters. Yet in testimony before the committee, the Navy testified that there is no probable circumstance when the Marine Corps will have to mount an opposed landing requiring F-18 strike support when it could not count on Navy F-18s to perform the mission. The Marine Corps has argued that it might have to mount such an assault at a time when the Navy is fighting for air superiority in the region. The vulnerability of amphibious operations, however, suggests such an assault is unlikely if the Navy has not established air superiority in the first place. If Navy aircraft carriers are fighting for survival against an air threat, it is unlikely amphibious ships will remain relatively stationary only miles off shore while a slow paced amphibious landing takes place. And it should be noted that unlike Marine Corps helicopters and the AV-8B aircraft, Marine Corps F-18s will likely get to the fight on Navy carriers. In those instances when the Marine Corps will operate ashore with no Navy support, it is most likely this would be a joint operation where the Air Force could provide interdiction support.

The committee believes the Secretary of Defense and the Chairman of the Joint Chiefs of Staff should rationalize aviation procurement among the Navy, Marine Corps, and Air Force to eliminate the redundancy in strike fighter force structure. The committee does not believe that this automatically means Marine Corps F-18 squadrons should be deactivated. Indeed, Marine Corps squadrons could be routinely attached to carrier air wings, if analysis proves that is the best solution.

For all these reasons, the committee concludes that the Navy is procuring excessive numbers of F-18 aircraft, and recommends a reduction of 24 aircraft and $497.6 million in fiscal year 1991. The committee also recommends a reduction of $54.8 million in advance procurement, which will permit an ongoing procurement of 42 aircraft per year. This quantity will preserve the option for sufficient numbers of aircraft for whatever option the Secretary chooses.

CH/MH-53E SUPER STALLION AIRCRAFT

The Administration requested a total of $434.8 million for the CH/MH-53E program. The Defense Department has indicated that all of these helicopters would have been CH-53E aircraft, and would have been used to implement the alternative of the Secretary of Defense for filling the Marine Corps' requirement for medium lift. The Defense Department has recently delivered draft copies of the Institute for Defense Analysis study on the cost effectiveness of using the V-22 tilt rotor aircraft to fill the medium lift mission, versus a mixture of existing types of helicopters. It is not clear what the committee should conclude from this voluminous report, given the fact that it was provided only one week prior to mark-up. However, preliminary indications from this and other analysis is that the V-22 has the potential to be more militarily useful.

The committee recommends no funds be authorized for procurement of CH/MH-53E aircraft for fiscal year 1991, but does recommend authorization of $35 million in advance procurement funds for possible purchases next year of these aircraft for the heavy lift mission. The committee understands that the Marine Corps has a heavy lift mission requirement for buying additional CH-53E aircraft and will entertain future requests to do this. In the past, however, the Department of the Navy has been unwilling to fund these requirements. The committee directs the Department of the Navy to provide an assessment of the requirements for Marine Corps heavy lift in conjunction with the fiscal year 1992/1993 budget request.

The committee recognizes, however, that there are urgent requirements for MH-53 mine warfare helicopters to replace aging RH-53D aircraft, and has provided for those elsewhere as a part of the Guard and Reserve procurement initiatives.

V-22 ADVANCE PROCUREMENT

The Administration requested no authorization for V-22 advance procurement in fiscal year 1991. However, $200 million of the advance procurement funds authorized in fiscal year 1989 were withheld by the Secretary of Defense because of his decision to cancel the V-22 program. The committee recognizes that spending funds to start the production line would be premature and would be inconsistent with the "fly before buy" approach that is critical to reducing uncertainty and wasted effort in acquiring new systems (see V-22 discussion in the Research, Development, Test, and Evaluation, Navy section of this report for further details).

The committee recommends that the $200 million of fiscal year 1989 procurement funds be transferred to the Navy's research and development account, and that the V-22 R&D program proceed to reduce the uncertainties associated with developing and producing this innovative aircraft.

T-45 TRAINING SYSTEM UPGRADE

The amended budget request includes $305.9 million to continue procurement of the T-45 trainer system. In spite of its troubled development history, the committee believes the urgency of the need to field a modern trainer system and the corrective action plan developed by the Navy warrants continued funding of the program.

The T-45 program was initiated as an adaptation of an existing aircraft. The current T-45 trainer aircraft continues to utilize old generation "gauge" cockpit avionics. Yet the Navy's newer aircraft—the F-18, F-14D, and the A-12—will feature modern computer-generated cockpit displays. As such, the T-45 trainer cockpit displays should be updated to facilitate training for the newer type of aircraft in Navy inventories.

The need to update the T-45 cockpit is heightened by the Navy and Air Force plans to field a new Joint Primary Aircraft Training System (JPATS) to replace existing primary trainers for both Services in the late 1990s. The JPATS aircraft will feature modern computer-generated cockpit displays. It will make little sense to field a primary trainer with modern displays, only to send Navy pilots on to advanced training in a T-45 that continues to feature "steam gauge" cockpit displays.

Consequently, the committee directs the Navy to initiate a cockpit upgrade program for the T-45 and recommends an increase in authorization of $21.8 million to initiate an Engineering Change Proposal (ECP) for an updated avionics cockpit for the T-45. The Navy should structure the program so that new displays could be installed not later than in the 73rd production aircraft. The Navy should also apply the funds to upgrade supporting simulators and technical manuals.

NAVY AIRBORNE SENSOR IMPROVEMENTS

The amended budget request includes the following funds for modifying existing aircraft for purposes of establishing training and testbed systems for various reconnaissance sensor improvement programs:

	Millions
A-3 Series	$0.1
EP-3 Series	22.4
Aircraft Industrial Facilities	6.0

The Navy has not been able to justify these proposed expenditures and has not identified the funding implications for these training/testbed systems. The committee also questions the necessity for upgraded components for these systems in light of other ongoing improvements to other Navy airborne sensors. Consequently, the committee recommends that no funds be authorized for these activities.

P-3 SERIES MODIFICATIONS

The Administration requested an authorization of $248.2 million for P-3 aircraft modifications in fiscal year 1991. This amount included $6.1 million to begin procurement of upgrades to some P-3 sensor systems. The Navy budget documentation cites changing threat and intelligence collection as the basis for this procurement, without giving any further definition. The committee is not prepared to authorize a new improvement program without more information.

The committee recommends that no funds be authorized for this activity and that the P-3 series modifications program receive an authorization of $242.1 million in fiscal year 1991, a reduction of $6.1 million.

NAVY AIRCRAFT MODIFICATIONS AND UPGRADES

Budget pressures led the Navy to shortchange several modification and upgrade programs which are extremely important in maintaining the ongoing viability of existing fleet aircraft. Modification of in-service aircraft represents one of the most cost-effective means of retaining combat potential in the face of tighter budgets. Based on data provided by the Navy at the committee's request, the committee recommends the following adjustments to the budget as submitted:

(1) A-6 Series—The committee recommends authorization of an additional $85.0 million to accelerate installation of the constant speed drive system modification, accelerate Block IA non-recurring and support expenditures, and conduct additional fuselage fatigue testing that was not included in the amended budget request.

(2) E-2—The committee recommends authorization of an additional $46.5 million to accelerate the introduction of the block 2 upgrade, to accelerate installation of the Joint Tactical Information Distribution System components, to conduct certain fatigue and ground vibration testing, and to install engineering changes to fix certain catapult gear and arresting hook fatigue problems.

(3) S-3A Engines—The committee recommends an additional authorization of $42.0 million to procure engines for the S-3 fleet.

(4) F-14—The committee recommends an additional $10 million for purposes of testing and evaluating fatigue life limits in the F-14.

TOMAHAWK

The Administration requested authorization of $808.7 million to procure 600 Tomahawk cruise missiles of all types in fiscal year 1991. This is an increase of 200 missiles above the fiscal year 1990 funded level of 400, which was sufficient to keep two suppliers producing the Tomahawk. The increased level was to have been the first of two increments of 600 missiles in each of fiscal years 1991 and 1992 that would have bought the rest of the missiles required to complete the Navy's planned procurement. The Navy has now decided to stretch out production through at least fiscal year 1995. Given the Navy's decision to extend production, there is no compelling reason to increase the production rate as requested. In fact, maintaining production at 400 missiles will extend the period during which the benefits of dual sourcing can be achieved.

The committee recommends authorization of $662.5 million for procuring 400 Tomahawk missiles in fiscal year 1991, a reduction of $146.2 million from the request.

PHOENIX MISSILE

The Administration has proposed to terminate production of the AIM-54 Phoenix air-to-air missile after fiscal year 1990. The committee understands that the Navy proposed termination in order to meet fiscal constraints, match reductions in force structure, and preserve long term modernization by emphasizing the future Advanced Air-to-Air Missile (AAAM). The committee is concerned, however, that termination of the AIM-54 missile program will leave nearly a 10 year gap until the AAAM missile will start to enter fleet inventories.

The committee does not recommend that the AIM-54 missile be kept in production. The committee is aware, however, that the Navy has already funded and completed the research and development of an upgraded version of the AIM-54 that can be retrofitted on existing missiles.

The committee believes it is prudent to capitalize on this completed research. The committee also understands that such a retrofit program will preserve key elements of the industrial base should mobilization become necessary or progress on the AAAM missile delayed.

The committee recommends that the current production rate on the 420 missiles authorized for procurement in fiscal year 1990 be slowed to allow production of 240 AIM-54C missiles in fiscal year 1990 and 180 AIM-54C Improved missiles in fiscal year 1991. The committee recommends an authorization of $60 million in fiscal year 1991 to pay for the additional cost of the improved components for the 180 missiles and to sustain ongoing program management through the fiscal year.

SHORT RANGE AIR-TO-AIR MISSILE FOLLOW-ON

The committee understands that the Air Force and Navy are pursuing different approaches to modernizing the AIM-9 Sidewinder air-to-air missile. Limited budgetary resources do not permit parallel and redundant development activities.

The committee notes the considerable progress achieved by the Joint Tactical Air-to-Air Missile Office (JTAAMO) in synchronizing Navy and Air Force requirements into a joint air-to-air missile master plan. The committee believes the JTAAMO is the appropriate office to recommend to the Joint Air-to-Air Missile Steering and Oversight Committee an appropriate common modernization plan for AIM-9 missiles.

In anticipation of the development of a common program, the committee recommends denial of the specific authorization for AIM-9 improvements in the Navy and Air Force, and recommends an authorization of $35.0 million in RDT&E, Defense Agencies to fund a common modernization program.

WEAPONS INDUSTRIAL FACILITIES

The committee recommends that $13.1 million be provided to continue the modernization and environmental clean up of the Allegany Ballistics Laboratory, a Government-owned, contractor-operated facility in West Virginia which currently produces propulsion units for Navy missiles.

16-INCH GUN AMMUNITION

The Administration requested authorization of $33.0 million in fiscal year 1991 for 16-inch gun ammunition. The recent findings of

Sandia Laboratory and the reopening of the Navy's investigation into the explosion on U.S.S. *Iowa* showed that there are significant concerns about the safety of using the 16-inch guns. Whether the Navy will keep the remaining two battleships in active service is also in doubt. Pending a decision on the battleships' continued service and more conclusive results from the accident investigation, the committee recommends that no funds be authorized in fiscal year 1991 for this program.

TRIDENT SUBMARINE CONSTRUCTION

The amended defense budget request for the Trident submarine program was for $1,244,629,000 for the 18th Trident submarine, and $143 million for advanced procurement for the 19th and 20th Trident submarines. In the National Defense Authorization Act for Fiscal Years 1990 and 1991, the committee authorized long-lead funding for the 18th and 19th Trident submarine.

The Department of Defense has not provided the committee with a proposed force structure plan outlining how many Trident submarines are required under an expected START Treaty, nor has it provided the committee with a Six-Year Defense Program. Consequently, the committee believes that given severe budget constraints this year, the responsible course is to authorize the 18th Trident submarine but directs the Navy to terminate all advance procurement activities for the 19th and 20th Trident submarines. Accordingly, in section 110, the committee denies funds requested for advance procurement and prohibits any further expenditure of previously appropriated advance procurement funds for all Tridents beyond the 18th submarine. Fiscal year 1990 advance procurement funds in the amount of $99.3 million remain unobligated for the 19th Trident submarine. The committee recommends a reduction of this amount to the amended defense budget request for fiscal year 1991 for the 18th Trident submarine.

In testimony before the committee, the Navy indicated that no reprogrammings from the Trident submarine account would be submitted in fiscal year 1990. Navy budget documents, however, show that $81.7 million in prior year funds for Trident submarine procurement are excess to program requirements. Navy documents show that $3.2 million, $15 million, $10 million, and $53.5 million are available from fiscal years 1984, 1985, 1986, and 1987, respectively. Accordingly, the committee recommends a further reduction to the fiscal year 1991 request of $81.7 million.

The committee notes that since fiscal year 1985 alone, the Navy has reprogrammed at least $650 million from the overall Trident submarine program (including platform support procurement accounts).

"SEAWOLF" (SSN-21) CLASS SUBMARINE

The SSN-21 is designed to be the newest attack submarine incorporating the best survivability, quieting, and fire control technology available to the Navy. The ship will contain the BSY-2 submarine combat system which is expected to represent a leap in technology and capability. The Navy expects to spend roughly $36 billion (in constant 1985 dollars) to procure 29 SSN-21 submarines by the year 2000.

The committee believes that, with the vast funding involved, the SSN-21 is another program that could benefit from a more cautious acquisition process, in keeping with the concept of "fly before buy." The committee heard testimony from the General Accounting Office expressing substantial concern over the concurrency of the SSN-21 program, both for the ship design and construction and for the development of the BSY-2 combat system. Delaying production of the next ships in the SSN-21 program would allow additional time for the ship design to mature and for the BSY-2 development to proceed to a successful conclusion.

The committee notes how an aggressive development effort for the BSY-1 combat system for the improved SSN-688 resulted in ships being initially delivered to the Navy with only partial combat system capability. The committee supports the SSN-21 program, and believes that the Navy and the contractors will ultimately be able to deliver on the promises of the program. The committee, however, questions the urgency of proceeding with this program as quickly as has been proposed by the Navy.

The lead ship price has already come very close to breaching a cost cap established by the former Secretary of the Navy. That cap was established to prevent the next generation of attack submarine from becoming so expensive that the Navy could not afford to buy as many as it needs. That cap, however, was set when projected funding plans were much more robust than anyone now believes will be available. If the SSN-21 program proceeds too quickly, long term affordability of the submarine fleet could be adversely affected because the Navy might feel compelled to rush decisions just to maintain the schedule.

The committee believes that allowing the program another year before funding the first follow-on ships would permit a more orderly acquisition schedule; thus, it recommends that no SSN-21 submarines be authorized in fiscal year 1991. The committee does recognize that the design of the lead ship has not been fully funded in the fiscal year 1989 and prior programs, and recommends authorization of $150.0 million to continue this design effort.

The committee also understands that the Navy intends to purchase only two SSN-21 class submarines in fiscal year 1992, and notes that advance procurement funds sufficient to support that effort have already been authorized. Therefore, the committee proposes no authorization of advance procurement funds for the SSN-21 program in fiscal year 1991.

The committee, however, mindful of the need to maintain a robust attack submarine capability and a strong industrial base, recommends authorization of two additional *Los Angeles* (SSN-688) class submarines, as described in the next section of the report.

"LOS ANGELES" (SSN-688) CLASS SUBMARINE

The Administration requested no authorization in fiscal year 1991 for *Los Angeles* (SSN-688) class submarines. This would shut down production of this class of attack submarines. The committee heard testimony from the Navy that there is no longer any margin for upgrading the ship with additional product improvements. Therefore, it does not appear prudent to skip the next generation of attack submarine, the SSN-21, in favor of making more modest upgrades to the SSN-688.

However, the Navy also testified that the improved SSN-688 submarine is still better than the threats that U.S. submarine forces could face. The committee realizes that the shipbuilding industrial base has been rapidly declining over the past decade, and that there could be severe effects on the submarine component of the industry if no submarine production were authorized in fiscal year 1991.

The committee recommends authorization of $1,805.0 million in fiscal year 1991 for procurement of two SSN-688 class submarines. The usual submarine production plan calls for buying long lead nuclear material and components 1 or 2 years in advance of authorization of a ship to maintain orderly schedules. Although no advance procurement funding will have been provided for these two ships, the Navy has bought several year's supply of reactor cores and components for SSN-688 class submarines with Other Procurement, Navy (OPN) funds. These OPN assets can be used to support the shipbuilding schedule and can be replenished with items delivered from the Shipbuilding and Conversion, Navy (SCN) funds. The committee notes that the practice of trading SCN and OPN equipment to smooth out acquisition schedules is not unusual.

SUBMARINE CONSTRUCTION SHIPYARDS

The committee is aware that one of the alternatives being considered in the Secretary of Defense's Major Warship Review would limit construction of *Seawolf* (SSN-21) class submarines to a single yard. The committee believes that competition between two yards in the construction of nuclear-powered attack submarines is important to the Nation and should not be given up absent a clear showing that such action is in the long-term best interests of the United States. The United States has funded the construction of three to five nuclear-powered submarines annually in recent years (one Trident SSBN and two to four SSNs). The Soviet Union has been building an average of nine submarines annually—five nuclear submarines and four non-nuclear ones. They have five different yards building submarines—Severodvinsk Shipyard 402, Leningrad Sudomekh Shipyard, Komsomolsk Shipyard 199, Gorky Shipyard, and Leningrad United Admiralty Shipyard.

The case for sole-sourcing these ships has not yet been made, and competition in the building of attack submarines may better serve the nation's interests. Much of the argument for eliminating competition rests on the claim that some overhead costs are duplicative and could be eliminated. But these potential savings must be balanced against the positive stimulus for quality and cost reduction which a well-structured competition can provide. For example, the Navy achieved dramatic cost savings in the AEGIS cruiser program by going to a second source; these savings were not predicted using conventional cost analysis techniques, including estimates of the learning curve effects.

The committee doubts that a threat by the government to re-introduce competition by a second submarine yard would be convincing or persuasive in lowering the cost or improving the performance at a sole-source shipyard. A decision by the government to exclude a second yard from building *Seawolf* class submarines would soon become irreversible. The government would not be able to quickly reconstitute capability for building nuclear-powered submarines at a second yard for several reasons: the absence of skilled labor; environmental regulations governing construction of nuclear power plants; high capital investment; and the absence of a subcontractor base.

To ensure a full consideration of all these factors, the committee recommends a provision (sec. 111) that would direct the Secretary of Defense not to reduce the industrial base for submarine construction from two shipyards to one until he provides a study which examines submarine industrial base requirements, the effects of such a reduction in the number of submarine construction yards, and whether such a reduction is in the long-term best interests of our national security. The Secretary of Defense is directed to ensure that no action is taken prior to May 1, 1991, which would have the effect of limiting construction of any class of attack submarines to a single shipyard.

"ARLEIGH BURKE" (DDG–51) CLASS DESTROYERS

The Administration requested authorization of $3,570 million in fiscal year 1991 for five DDG–51 class destroyers. These ships are outfitted with the AEGIS weapons system, which represents roughly 20 percent of the cost of the ship. AEGIS ships will provide the Navy with the capability of combating the anti-ship missile threat.

The Government of Japan has decided to buy the AEGIS weapon system for installation on destroyers that it intends to build in Japanese shipyards. Japan has announced its intention to buy a second AEGIS system from the U.S. manufacturers. The committee recommends authorization of $3,540 million for five DDG–51 class destroyers, a reduction of $30 million to reflect anticipated contract savings from the additional AEGIS system being bought by Japan.

SHIP COST ESTIMATES

The Navy conducts regular reviews of the estimated costs of ships under construction, and the committee is aware that the Navy probably will seek authority to reprogram hundreds of millions of dollars among the shipbuilding programs already underway. The committee appreciates efforts taken by the Navy thus far to provide the current status of this matter.

The Department is reminded that current policy calls for full funding of ship costs, not incremental funding. While proposals to modify this practice would be considered, the committee opposes any de facto movement towards incremental funding.

The Navy is urged to provide accurate and timely ship cost estimates or revisions; manipulation of ship cost data is likely to result in disapproval of reprogramming or funding requests.

RELOCATABLE OVER-THE-HORIZON RADAR (ROTHR)

The Navy currently has one Relocatable Over-the-Horizon Radar (ROTHR) system operational at Amchitka, Alaska. In addition, the Navy has on contract a limited-rate production buy of three more ROTHRs for deployment to Virginia, Guam, and the United Kingdom. The amended fiscal year 1991 budget request includes $88.558 million to exercise an option for a fourth ROTHR to be installed at the second Amchitka site. However, the final Environmental Impact Statement necessary for ROTHR installation in Guam has not been completed, and the Navy acknowledges that environmental and political issues on Guam itself could delay the start of construction by as much as 2 years.

Given the uncertain status of the funded Guam ROTHR, the committee recommends denial of the request for Navy procurement of a fourth ROTHR. The committee directs that the planned Guam radar be installed in Amchitka instead. In another section of this report, the committee recommends buying an additional ROTHR in fiscal year 1991 for the counter-narcotics, air sovereignty, and air defense missions. This radar would be funded within the counter-narcotics account in the Office of the Secretary of Defense.

SONOBUOYS

The Administration requested authorization of $71.5 million in fiscal year 1991 for the procurement of three types of sonobuoys: AN/SSQ-36, AN/SSQ-53, and AN/SSQ-62. No authorization has been requested for two other types of sonobuoys: AN/SSQ-57 and AN/SSQ-77.

The committee once again indicates its desire that the Navy fully fund its sonobuoy requirements for wartime operations and peacetime training. The committee notes that although the threat has decreased, the increasing quietness of Soviet submarines would require sonobuoys to be expended at even greater rates than was planned before. The committee also notes that the requested authorization would require that war reserve sonobuoys be used to support peacetime training.

The committee recommends authorization of $158.5 million in fiscal year 1991, an increase of $87 million to the request for the purchase of sonobuoys.

TRAINING DEVICE MODIFICATIONS

Trainers and simulation can help ensure combat proficiency at adjusted readiness and operating tempos. The Navy should focus on programs that would yield increased combat proficiency without the need to employ expensive fleet steaming time. This is particularly important for effectively using Naval Reserve resources.

The Administration requested authorization of $38.7 million for training device modifications to upgrade existing ship system training devices. The Navy currently owns four pierside training units which were bought in the early 1970s. Upgrades to these trainers have not kept pace with the introduction of new weapon and sensor system capabilities into the fleet. The Navy's current plan apparently provides for making incremental upgrades for the pierside trainers over an extended period, resulting in additional down time as these vans are pulled out of service several times and a significant delay in delivering needed training capability to the fleet.

The committee recommends authorization of $50.7 million in fiscal year 1991 for training device modifications, an increase of $12 million for the purpose of completing the upgrade of the pierside training system.

MARINE CORPS AMMUNITION

The committee recommends a reduction of $6.2 million to the M864 155mm artillery round because of the large production backlog of this round.

M1A1 MAIN BATTLE TANK

The fiscal year 1990 appropriation for procurement, Marine Corps included advance procurement funds to support purchasing 255 M1A1 tanks for the Marine Corps in fiscal year 1991. The administration decided to cancel Marine Corps M1A1 procurement after the fiscal year 1990 program.

The committee is concerned that this cancellation decision has left the Marine Corps with too few tanks to provide an adequate number to support the tanks' maintenance and to support realistic training at the Twenty Nine Palms training facility. Without an adequate maintenance "float," operational units will have to get by without their tanks whenever they are sent to depots for repairs, leaving the units at lower states of readiness. If tanks are not provided at the training facility, units would either have to train without tanks or have to borrow tanks from operational units in the vicinity. Borrowing would tend to degrade local units' readiness because their tanks would be tied up in training for substantial periods during the year.

Both of these deficiencies could be corrected by transferring some of the unused fiscal year 1990 M1Al advance procurement to purchase 22 M1A1 tanks. Therefore, the committee recommends that $62.4 million of the funds authorized and appropriated for MlA1 advance procurement be transferred to the M1A1 funding line to purchase 22 main battle tanks.

TACTICAL AIR OPERATIONS MODULE

The amended budget request included $47.4 million to procure six Tactical Air Operations Modules (TAOM) for the Marine Corps. Because of projected cuts in the number of Marine Corps aircraft squadrons and wing support squadrons, the committee concludes that the rate of fielding of TAOM modules could be reduced. The committee recommends an authorization of $31.6 million for four TAOMs.

ENGINEER AND OTHER EQUIPMENT

The Administration requested $112.5 million for engineer and other equipment for the Marine Corps. Secretary Cheney has indicated that the Marine Corps force structure is likely to be reduced substantially over the next few years. The budget request for engineering and other support equipment was proposed before the reductions were directed. As a result, the committee recommends a $10 million reduction in the engineer and other equipment accounts, to be allocated by the Marine Corps.

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	AIR FORCE PROCUREMENT CHANGES						
	AIRCRAFT PROCUREMENT						
2	B-2A (MYP)	5	2,495,899	(3)	(506,899)	2	1,989,000
3	B-2 ADVANCE PROCUREMENT (CY)		710,100		57,000		767,100
5	F-15 ADVANCE PROCUREMENT (CY)				100,000		100,000
6	F-16 C/D (MYP)	150	2,357,108	(42)	(432,000)	108	1,925,108
6a	F-16 PRIOR YEAR			(20)	(202,900)		(202,900)
7	F-16 ADVANCE PROCUREMENT (CY)		437,400		(48,300)		389,100
11	C-17 (MYP)	6	1,704,486	(6)	(1,404,486)		300,000
12	C-17 ADVANCE PROCUREMENT (CY)		204,300		(204,300)		
31	TR-1A		36,000		(18,000)		18,000
51	C-135		631,900		(59,348)		572,552
53	E-4		37,300		(37,155)		145
66	SPARES AND REPAIR PARTS		1,391,057		(858,944)		532,113
70	OTHER PRODUCTION CHARGES		491,474		38,088		529,562
	RETIREMENT OF OBSOLETE AIRCRAFT				(114,400)		(114,400)
	MILSTAR TERMINALS				(500)		(500)
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(232,000)		(232,000)
	TOTAL AIRCRAFT PROCUREMENT AIR FORCE		14,217,400		(3,924,144)		10,293,256

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	MISSILE PROCUREMENT						
1a	RAIL GARRISON LAUNCHERS		1,053,457		(1,053,457)		
2	MX ADVANCE PROCUREMENT (CY)		133,900		(133,900)		
17	AMRAAM	1,250	893,382	(800)	(430,000)	450	463,382
33	SPARES AND REPAIR PARTS		271,355		(158,686)		112,669
50	SPECIAL PROGRAMS		3,101,796		(380,000)		2,721,796
51	SPECIAL UPDATE PROGRAMS		237,345		(100,000)		137,345
	TOTAL MISSILE PROCUREMENT AIR FORCE		9,005,700		(2,256,043)		6,749,657
	OTHER PROCUREMENT						
4	ITEMS LESS THAN $2,000,000		6,307		(1,300)		5,007
27	BIGEYE		57,822		(57,822)		
31	MJU-23 FLARE	5,052	7,310	2,400		7,452	7,310
49	BUS, 44 PASSENGER	44	3,785		(800)	44	2,985
53	LAW ENFORCEMENT VEHICLE	277	3,779		(700)	277	3,079
70	CAP VEHICLES				800		800
72	TRUCK, TANK, 1200 GAL	25	1,425		(500)	25	925
74	TRUCK, TANK, FUEL, M-49	28	2,610		(600)	28	2,010
98a	UNDISTRIBUTED REDUCTION-TACTICAL VEHICLES				(10,000)		(10,000)
112	TACTICAL AIR CONTROL SYS IMPROVE		232,027		(75,000)		157,027
113	WEATHER OBSERV/FORCAST		49,696		(4,500)		45,196
134	NUDET DETECTION SYSTEM (NDS)		17,625		(17,625)		
154	TELEPHONE EXCHANGE		70,882		(20,000)		50,882
160	MILSTAR		178,014		(178,014)		
172	SPARES AND REPAIR PARTS		139,839		(27,200)		112,639
173	CAP COM & ELECT				500		500
187	BASE MECHANIZATION EQUIPMENT		24,324		(3,900)		20,424
193	BASE PROCURED EQUIPMENT		38,485		(10,000)		28,485
205	INTELLIGENCE PRODUCTION ACTIVITY		81,566		(1,829)		79,737
208	SELECTED ACTIVITIES		5,354,135		(181,197)		5,172,938
	GUARD AND RESERVE EQUIPMENT CONSOLIDATION				(191,200)		(191,200)
	TOTAL OTHER PROCUREMENT AIR FORCE		8,307,400		(780,887)		7,526,513

MATCHING AIR FORCE PROCUREMENT PLANS TO LOWER INVENTORY GOALS

Many of the Air Force's procurement plans were established several years ago at a time when the Air Force was projecting a stable force structure consisting of 36 tactical fighter wings. During the past year, the Air Force has undertaken a substantial restructuring of its force structure in light of diminished requirements and budget restrictions. Additionally, the Air Force envisions closing several dozen current operating bases. The Department of Defense has confirmed that at least 8 and maybe as many as 11 tactical fighter wings will be deactivated over the next 5 years. The committee would expect that much of this equipment would be used to modernize Air National Guard and Air Force Reserve squadrons.

The procurement requests for many individual items, however, have not been adjusted to reflect this reduced force structure. Consequently, the committee recommends an authorization for the items listed below based on the revised force structure currently projected by the Air Force.

Item	Request	Recommendation
F-16 fighter*	$2,357.1 m.	$1,722.2 m.
Tactical vehicles	176.7 m.	166.7 m.
Tactical air control system improvement	232.0 m.	$157.0 m.
Telephone exchanges	70.9 m.	50.9 m.
Base procured equipment	38.5 m.	28.5 m.

* presumes reduction in FY 1990 to 130 aircraft and in FY 1991 to 108 aircraft

B-2 BOMBER PROGRAM

The amended defense budget request for fiscal year 1991 for the B-2 bomber contained $1,566.7 million for research, development, test and evaluation (RDT&E), $2,495.9 million for five new production aircraft, and $710.1 million for advance procurement for long-lead items for 10 B-2 new production aircraft in fiscal year 1992. Following completion of a major aircraft review in the spring of 1990, Secretary Cheney announced a major restructuring of the B-2 program. Under the revision, the total B-2 buy would be reduced from 132 aircraft to 75; the production rate of B-2s (once rate production begins) would be limited to not more than 12 B-2s per year; and the request for new production B-2 aircraft in fiscal year 1991 would be reduced from five to two.

The amended defense budget request, as revised by the Major Aircraft Review, for fiscal year 1991 for the revised B-2 program thus becomes $1,750.7 million for RDT&E, $1,989.0 million for two new production B-2 aircraft in fiscal year 1991, and $767.1 million for advance procurement of long-lead items for six new production B-2s in fiscal year 1992.

The committee approved the revised budget request in full. The National Defense Authorization Act for Fiscal Years 1990 and 1991 (P.L. 101-189) imposed a number of limitations on the obligation and expenditure of fiscal year 1990 funds for the two new production B-2s. These limitations were evidence of the congressional commitment to careful step-by-step testing of the capabilities of the B-2 aircraft. The committee applauds the Secretary's decision to hold fiscal year 1991 production to two aircraft, despite the effect of this slowing of production on program cost. Much more test information will be available next year to support any decision to begin to ramp up to rate production.

The committee considered whether to impose additional specific restrictions on the obligation or expenditure of fiscal year 1991 funds, and concluded that such limitations are largely unnecessary in light of last year's legislation. Before fiscal year 1991 procurement funds may be obligated, section 112 of last year's Act requires an annual certification by the Secretary of Defense that all performance milestones contained in the latest full performance systems maturity matrix (established by section 232(a) of the National Defense Authorization Act for Fiscal Year 1989) have been met. The full performance systems maturity matrix enumerates the major testing milestones that the B-2 must meet throughout its development and testing cycle. In addition, under section 113 of Public Law 101-189, the Secretary's certification and the data upon which it is based are subject to review by the Comptroller General. Under section 115 of Public Law 101-189, all such results are further subject to review by an ongoing Independent Assessment group. In light of these continuing programmatic restrictions, the committee has added only one additional limitation to prohibit the obligation of any fiscal year 1991 procurement funds until the limitations on the obligation of fiscal year 1990 funds have been lifted.

The committee takes note of Secretary Cheney's proposed B-2 program revisions. The committee, however, made clear last year in section 119 of Public Law 101-189 that the approval of two new production aircraft did not constitute a commitment to serial production. The B-2 flight test program to date has been very positive, with no major problems and a high availability of the airframe for test flights. However, important additional tests remain to be accomplished, especially with regard to the confirmation of the B-2's low-observability features, and with respect to terrain-following capability. In last year's statement of managers, the conferees stated:

> "The B-2 flight test program during fiscal years 1990 and 1991 will provide most of the answers to questions about B-2 flight performance and low observability. . . . Thereafter, assuming the fight test results are satisfactory, the congressional defense committees will have to decide whether or not to make a major commitment to B-2 production."

The committee continues to support this incremental approach of "fly before buy," and therefore takes no position at this time on the future size of the B-2 procurement program or the rate at which they should be procured. Additional guidance with regard to the B-2 program is contained in the classified annex to this report.

F-16 FIGHTER

The amended budget submission includes $2,357.1 million to procure 150 F-16 aircraft for fiscal year 1991, and $437.4 million for advance procurement for 150 F-16 aircraft in fiscal year 1992. This would represent the second and third year in a 4-year multiyear contract of 600 F-16 fighters which was initiated in fiscal year 1990.

The inventory objective for the F-16 and the procurement goals under this multiyear contract were established 2 years ago. Since that time, the Air Force has proposed a substantial reduction in the number of fighter squadrons. The Department of Defense has indicated that it will cut as many as 11 wings of fighters. There is no need to procure 150 fighters per year in light of this substantially smaller force.

The committee has long supported stable production rates and encouraged the Department to produce weapons at the highest practical production rate to minimize waste that comes from excessive overhead. The committee cannot, however, justify rates of production that provide more aircraft than is needed to modernize a shrinking force structure. Indeed, the Secretary of Defense recently said that 72 F-16 aircraft per year were sufficient to modernize future Air Force force structure requirements. The committee also believes that it is essential that an ongoing fighter production line be sustained, which is difficult if the annual production rate substantially exceeds inventory requirements.

Consequently, the committee recommends an authorization of $1,722.2 million for 88 aircraft in fiscal year 1991. This represents a reduction of 62 aircraft. This reduction is meant to cover both fiscal years 1990 and 1991. Since the fiscal year 1990 contract has not been definitized, the committee recommends that 130 aircraft be produced in fiscal year 1990 (a reduction of 20 aircraft) and 108 aircraft be produced in fiscal year 1991 (a reduction of 42 aircraft). Further, the committee recommends an authorization of $389.1 million for advance procurement for 108 F-16 aircraft in fiscal year 1992.

C-17 AIRCRAFT PROCUREMENT

The administration originally requested authorization of $2,146.1 million in fiscal year 1991 for the procurement of six C-17 transport aircraft. Since that request, the Secretary of Defense conducted a Major Aircraft Review (MAR) of several programs, including the C-17. Based on this review, the Secretary has reduced his request for authorization to $1,103.8 million for two C-17 aircraft and has cut the total program from 210 aircraft to 120.

The committee has been committed to the C-17 and to achieving the capabilities the C-17 could add to our airlift forces. The Secretary's decision to cut the total C-17 program quantity does not appear to have been based upon the sort of rigorous analysis that would come from having an updated Congressionally Mandated Mobility Study (CMMS). The committee notes that the original CMMS was closely tied to the decision to proceed with the CX (now called C-17) program and intends to withhold judgment on the total size of the C-17 program needed until the results of an updated CMMS are available.

One benefit that the Secretary testified would accrue from his decision to slow down the C-17 program would be a reduction in the level of concurrency. He stated in his prepared remarks that, "I also propose to reduce fiscal year 1991 procurement from 6 to 2 aircraft to allow additional flight testing before increasing procurement." As can be seen from the following table, the planned ramp-up in production has been reduced substantially in the later years of the plan:

C-17 EVENT-BASED CONTRACT AWARDS
(Before the Major Aircraft Review)

Contract Option	Lot	Quantity	Event	Original Schedule	Current Schedule
FY 89	II	4	Mission Computer Software Critical Design Review	Awarded	--
FY 90	III	4	R&D Aircraft Assembly Complete	Jan 90	Dec 90
FY 91	IV	6	First Flight of First Production & R&D Aircraft	Oct 90	Sep 91
FY 92	V	12	Acceptance of Fifth Production Aircraft	Sep 91	Jun 92

The Air Force has been managing the C-17 program using an "event-based", or milestone schedule. The following table shows the events upon which contract awards were based and also shows how the scheduled has slipped from the original plan:

C-17 PRODUCTION PLANS

	88	89	90	91	92	93	94
Budget Request (1/90)							
Annual Procurement	2	4	4	6	12	24	29
Cumulative	2	6	10	16	28	52	81
Major Aircraft Review Results (4/90)							
Annual Procurement	2	4	4	2	6	12	18
Cumulative	2	6	10	12	18	30	48

The table shows how the Air Force's original plan had been to award the production contract for the aircraft authorized in fiscal year 1990 upon completion of assembly of the first research and development aircraft. The committee notes that this event is currently scheduled to take place in December 1990, three months into fiscal year 1991. The next major milestone, and the basis for awarding the six aircraft originally requested for fiscal year 1991, would have been completion of first flight of both the research and development aircraft and the first production aircraft. This event has slipped from October 1990, to September 1991, which is only several weeks away from fiscal year 1992.

Now, however, the Air Force plans to accelerate award of the fiscal year 1991 aircraft and ignore the milestone that was to have been achieved. It plans to award the four aircraft from fiscal year 1990, as originally planned, and the two aircraft from fiscal year 1991 at the same time. It would also accelerate awards of succeeding fiscal years' contracts to the preceding milestone, as may be seen in the table below. Just focusing on fiscal year 1991, the Air Force's new plan would place more aircraft on contract before first flight than Secretary Cheney believed would have been on contract before he made his decision to slow the C-17 program down. This new plan hardly follows the Secretary's expressed intent to "allow additional flight testing before increasing procurement."

C-17 EVENT-BASED CONTRACT AWARDS - NEW AIR FORCE PLAN
(After the Major Aircraft Review)

Contract Option	Lot	Quantity	Event	Original Schedule	Current Schedule
FY 89	II	4	Mission Computer Software Critical Design Review	Awarded	--
FY 90 FY 91	III IV	4 +2 6	R&D Aircraft Assembly Complete	Jan 90	Dec 90
FY 92	V	9	First Flight of First Production & R&D Aircraft	Oct 90	Sep 91
FY 93	VI	18	Acceptance of Fifth Production Aircraft	Sep 91	Jun 92

NOTE: Current Air Force staffing documents indicate that the Air Force plan now is to purchase 9 and 18 aircraft in fiscal years 1992 and 1993, versus the 6 and 12 aircraft option chosen by Secretary Cheney

FY 1992 contract would be awarded in October 1991.

FY 1993 contract would be awarded in October 1992.

The committee notes that major problems in several of the Major Aircraft Review programs, including the C-17, came to light shortly after the Secretary completed his review. For the C-17, the Air Force found that the contractor's procurement practices did not measure up to standards and have emporarily revoked the contractor's authority to issue larger procurement orders. The committee believes that the various revelations so close upon completion of the MAR means that the staffs of the various Military Departments may not have taken the reviews seriously, but most certainly indicates that they provided inadequate support for the Secretary that calls into question many of the decisions he made.

For the C-17, the committee does not believe that the Air Force went far enough in its attempts to adhere to the "fly before buy" concept. The committee has received testimony from the General Accounting Office that the program is still very concurrent, and that the major management restructuring that the contractor has undertaken has not been in place long enough to provide any conclusive evidence that the schedule slippages that this program has experienced will not be repeated. The Air Force's new plan would appear to increase concurrency far beyond the plan Secretary Cheney thought he was approving, rather than slow down production to let the testing catch up.

Based on an assessment of the program status, the committee recommends no production authorization in fiscal year 1991 because delaying further production funding until fiscal year 1992 will serve several beneficial results: (1) providing funds along a schedule that is closer to when they are needed and can be productively used; (2) reducing the pressure on the contractor to maintain old production schedules even after testing has slipped; (3) preventing the Air Force from making the program more concurrent than it already is; and (4) maintaining adherence to the event-based schedule and award the next lot of aircraft upon successful completion of the next milestone.

The committee realizes that there may be additional costs associated with stretching out procurement of the fiscal year 1990 aircraft to avoid breaking the production line. The committee is also aware that there is a need to support the subcontractor base. For both of these purposes, the committee recommends authorization of $300 million to cover these charges, no funds for advance procurement funds because advance procurement for the six aircraft planned by Secretary Cheney for fiscal year 1992 has already been budgeted in prior years, and no authorization for initial spare parts. If the Air Force can demonstrate a need for more funds for increased production costs or supporting the subcontractor base, the committee will consider a reprogramming request from the Air Force to fill the need. The committee notes its intent that the C-17 program be based on realistic production rates, given the reduction in threat, fiscal constraints, and current development and testing status of the program. The committee is certainly not interested in accelerating the C-17 schedule beyond what Secretary Cheney's decision reflected after the MAR. If there are further slips in the development schedule, there should be adjustments in the production schedule to limit the amount of aircraft on contract before performance warrants it.

The committee reiterates its support for the C-17 program and looks forward to receiving the results of the updated mobility study described elsewhere in this report. It expresses special interest in monitoring the progress of the C-17 program and receiving timely reports on significant changes to schedule, cost, or expected performance.

GAU-8 CANNON ON A-10 AIRCRAFT

The committee understands that the Air Force intends to use A-10 aircraft in observation/forward air control missions in the future. The committee believes it is essential that the Air Force retain the unique capability provided by the GAU-8 cannon on the A-10 aircraft, including when used in the observation/forward air control missions. The committee directs the Air Force not to disable or remove the GAU-8 cannon from any A-10 aircraft.

ICBM MODERNIZATION

The National Defense Authorization Act for Fiscal Years 1990 and 1991 provided $1.132 billion in fiscal year 1990 for the Peacekeeper Rail Garrison and Small ICBM programs. The conferees stated in the statement of managers: "By these actions, the conferees strongly reiterate their support for the administration's two-missile ICBM modernization program." Much has changed in the world since this statement was written. While the committee still believes that U.S. ICBM modernization is an important priority, the program must be reexamined in the context of changes in the conventional threat in Europe, reductions in defense spending, and recent U.S. initiatives in the START negotiations.

Changes in the Threat

Since last year's defense authorization conference, there have been significant changes in the military threat facing NATO. For all practical purposes, the Warsaw Pact is no longer an effective military alliance capable of threatening or invading NATO. As a result of these developments, the threat of a unilateral Soviet attack across Eastern Europe into existing NATO countries is judged by the intelligence community to be very remote.

In contrast to the unilateral reductions in the Soviet conventional threat in Europe and on the Chinese border, Soviet strategic nuclear forces modernization continues apace. The committee has received testimony from the intelligence community that the Soviet Union has continued with a vigorous and broad-based strategic offensive and defensive modernization effort that is improving its overall capabilities, including the continued deployment of two mobile ICBMs. The Soviet strategic program is a matter of continued serious concern and remains the paramount threat to U.S. national security, particularly in light of the unpredictable domestic events taking place in the Soviet Union.

Nonetheless, the decrease in the Soviet conventional threat may hold important implications for the Soviet strategic threat. As the likelihood of a conventional war in Europe has significantly decreased, a strategic nuclear war originating from escalation of a European conflict has also significantly diminished as a possible scenario.

Budgetary Constraints

Projected reductions in defense spending will require a reexamination of program priorities. Such a review is underway in the Department of Defense by way of the formulation of the Six-Year Defense Program (SYDP). The results of the SYDP are expected to be submitted to the committee soon, and will reflect changes, if any, to program priorities for strategic modernization.

Arms Control

In April 1990, President Bush proposed to President Gorbachev that the two countries agree in START to ban mobile MIRVed ICBMs as a first step toward much broader restrictions in START II on all land-based MIRVed missiles. The Soviets responded coolly to this proposal, insisting that any move toward greater deMIRVing of strategic forces would have to include stringent restrictions on MIRVed SLBMs, such as the Trident D-5. Although the two countries agreed not to pursue this matter further in START I, they did agree in a June 1 "Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability" to seek in negotiations which would follow the ratification of START "measures that reduce the concentration of warheads on strategic delivery vehicles as a whole, including measures related to the question of heavy missiles and MIRVed ICBMs."

RGMX Concurrency

On December 7, 1989, the General Accounting Office (GAO) released a report recommending that the initial Rail Garrison (RGMX) production decision be delayed until the Air Force has conducted some operational test and evaluation of the complete weapons system. The report also recommended that the acquisition schedule be revised so that the majority of the operational launch cars are not procured until after a final production decision, based on a completed operational test and evaluation program, has been made. According to the GAO, the Air Force plans to procure 73 percent of the operational launch cars before the final production decision is made.

The Air Force testified that since the MX is a well-tested and operationally deployed missile and since the United States is fully familiar with commercial train operations, the RGMX program is essentially an integration effort of "low and acceptable technical risk."

In evaluating the concurrency issue raised by the GAO, the committee considered three separate factors: the nature of the changed threat environment in Europe, cost, and arms control. With regard to the first factor, the committee concluded that in this altered threat environment, the continued survivability and penetrability of the air-breathing and sea-based legs of the triad allow us to proceed at a relatively slower pace in redressing our ICBM vulnerability problem. With regard to fiscal considerations, the committee noted that although revising the current RGMX plan to reflect a totally non-concurrent test/procurement program will reduce program costs in fiscal years 1991 and 1992, it will add $800 million to the total cost of the program were all 50 MX ICBMs to be redeployed in the rail-garrison basing mode within a few years of completion of the operational testing. Nonetheless, the committee also recognizes that by slowing the program, the prospects are increased that the bulk of the remaining $5.2 billion "cost to complete" expense might be avoided, by Soviet negotiating efforts to pursue a significant deMIRVing initiative in START II.

Committee Recommendations

Taking all these considerations into account, the committee recommends that procurement of the Rail Garrison MX basing system be slowed to eliminate the concurrency between the procurement of the missile trains and the test program for launching missiles from the trains and to enhance the prospects for achieving a ban on mobile MIRVed ICBMs in START II before incurring the expense of producing and deploying this system. Accordingly, the committee recommends that no funds be authorized in fiscal year 1991 for procurement of the RGMX system.

The committee welcomes the decision by the United States and the Soviet Union at the June 1990 summit to pursue in START II a stabilizing deMIRVing agenda. To maintain U.S. leverage in these forthcoming negotiations and to hedge against possible reversals in the course of Soviet policy or unforeseen technological breakthroughs in the areas of air defense and anti-submarine warfare, the committee believes that the option of subsequent deployments of the RGMX must be fully developed. Accordingly, the committee recommends the completion of research and development of the RGMX according to the current schedule and recommends the authorization of the full amount requested for this program, $548.2 million.

As the United States and the Soviet Union begin discussions on ICBM deMIRVing in START II, the importance of the Small ICBM missile will increase. Development and testing of this missile should be continued, but the committee recommends their deployment initially in existing Minuteman ICBM silos. This will reduce total program costs considerably. Nonetheless, full development of the mobile basing mode on hard mobile launchers (HML) should be pursued to provide an option for mobile basing at some time in the future, depending on Soviet strategic developments and arms control outcomes.

Therefore, the committee recommends the authorization of the full request for RDT&E for this program in fiscal year 1991, $202 million. The committee further directs the Secretary of Defense to submit at the time of his submission of the fiscal year 1992/1993 defense budget request, a revised Midgetman profile to reflect completion of the missile development and HML development according to the current schedule, but with deployment of 500 missiles in modified Minuteman silos.

Additional guidance with regard to the Small ICBM is contained in the section of this report on advanced strategic missile systems.

ADVANCED MEDIUM RANGE AIR TO AIR MISSILE (AMRAAM)

The amended budget request includes $893.4 million for the Air Force and $421.9 million for the Navy for procurement of 1,250 and 550 AMRAAM missiles, respectively, in fiscal year 1991.

The AMRAAM missile has proven to be very effective in operational testing, but has suffered serious reliability shortcomings. The Under Secretary of Defense for Acquisition established reliability goals that would have to be met before he would authorize the program to proceed into full-rate production. It will not be possible to achieve and demonstrate that reliability during fiscal year 1991. Consequently, the committee recommends an authorization of 900 missiles for fiscal year 1991, which is the current ceiling production rate for low-rate initial production. The committee recommends an authorization of $463.4 million for 450 missiles for the Air Force and $351.9 million for 450 missiles for the Navy. The authorization for the Air Force is greater because it is the lead Service and must carry certain overall program management costs not borne by the Navy.

AIR FORCE AMMUNITION

The committee recommends a reduction of $2.4 million to the request for the MJU-23 flare based on contract savings experienced in this program. The committee also recommends a reduction of $1.3 million to the request for the light anti-tank weapon based on uncertainty over future requirements for this system.

CIVIL AIR PATROL

The amended budget request includes $1.9 million to procure aircraft for the Civil Air Patrol. The Civil Air Patrol provides invaluable assistance for search and rescue, and plays an increasingly important role in the drug interdiction effort. The committee believes that the Civil Air Patrol also should continue to modernize its ground transportation vehicles and communications equipment. The committee recommends an additional $800,000 to procure vehicles and $500,000 to procure communications equipment appropriate for the Civil Air Patrol's requirements.

TELEPHONE EXCHANGES

The amended budget request included $70.9 million to upgrade the telephone systems at various Air Force bases in the United States and overseas. The Air Force plans to deactivate as many as two dozen major facilities over the next few years. The budget request for telephone exchanges was submitted before the force structure and base closures were determined. The committee believes that upgrades in telephone exchanges at overseas bases should be deferred until a final determination is made on overseas bases. As a result, the committee recommends an authorization of only $50.9 million for the telephone exchange program.

GROUND WAVE EMERGENCY NETWORK

The Ground Wave Emergency Network (GWEN) is a system of radio relay nodes which provide a communications network immune to the effects of high-altitude Electromagnetic Pulse (HEMP) to carry critical attack warning and force execution data. The Air Force has constructed a partial GWEN system consisting of 54 relay towers (out of a planned 56 towers) called the Thin Line Connectivity Capability (TLCC). The TLCC provided limited operational capability as of December 1988 and will provide initial operational capability in fiscal year 1991. The Full Operational Capability (FOC) phase of GWEN involves an additional 40 sites with the construction of sites scheduled during fiscal years 1991 and 1992.

The Air Force has requested that the National Academy of Sciences undertake a study of health effects of electromagnetic radiation from the GWEN low frequency communications system. The Academy has agreed to conduct such a study and expects the results to be available in the summer of 1991. The committee therefore directs the Department of Defense to halt all activities associated with actual construction and outfitting of the next phase of GWEN deployment. No funds may be expended for construction or deployment of the network beyond the current Thin Line System of 56 towers until 30 days after the Academy issues its report.

The committee notes that GWEN's importance to strategic connectivity will increase due to the recommended termination of the Milstar program. The committee notes also that GWEN frequencies and power levels are similar to such commercial radiation sources as television and radio broadcast towers; a discovery of potential adverse health effects from GWEN could have serious implications for a wide range of systems and services, including radio and television broadcasting.

One of the 40 FOC phase GWEN sites is planned for western Montana. Based on consultation with the Air Force, the committee is concerned that the present Bitterroot Valley Site Search Area (SSA) for the western Montana node is based on an incomplete analysis regarding alternative siting possibilities. The committee reviewed the GWEN siting criteria and found that potential siting areas exist in and adjacent to the eastern and southeastern sections of the Venn diagram (i.e. the area which defines the minimum signal strength requirement based on the overall network configuration) which have not been conclusively evaluated by the Air Force. The committee has sufficient reason to believe that SSAs in these portions of the Venn diagram may yield candidate sites which meet siting and operational criteria and at the same time move the relay node and tower to a less populated area, thus minimizing the adverse effect on the local residents.

Therefore, the committee prohibits the Air Force from constructing the proposed western Montana relay node and tower in the Bitterroot Valley SSA pending a report by the Secretary of the Air Force to the committee on the evaluation of alternative siting. This report shall contain, but not be limited to, detailed SSA evaluations of the eastern and southeastern areas of the Venn diagram for potential sites and the examination of whether areas adjacent to the outside boundary of the present Venn diagram would meet minimal signal strength requirements given the overall network configuration. Furthermore, the report must certify that no such alternative site exists before construction proceeds on any site within the Bitterroot Valley SSA.

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amount	-----Senate------ Change to Request Quantity	Amount	-----Senate------ Authorization Quantity	Amount
	DEFENSE AGENCIES PROCUREMENT						
29	MAJOR EQUIPMENT DSPO		213,900		(68,200)		145,700
36	C-130 MODIFICATIONS		96,300		14,700		111,000
42	25MM AMMUNITION	1,093	15,696		20,300		35,996
48	COMMUNICATION EQUIPMENT MODIFICATIONS		44,900		1,200		46,100
50	CLASSIFIED PROGRAMS		67,600		(69,194)		(1,594)
53	SMALL ARMS AND WEAPONS		1,300		5,200		6,500
53a	RANGER VEHICLE				2,500		2,500
53b	COASTAL PATROL BOAT				28,000		28,000
53c	SUBMARINE CONVERSION				10,000		10,000
	TOTAL PROCUREMENT DEFENSE AGENCIES		1,969,400		(55,494)		1,913,906

SPECIAL OPERATIONS FORCES

For several years, the committee has strongly supported efforts to strengthen the capabilities of U.S. special operations forces. In 1986, it contributed to the establishment of the U.S. Special Operations Command and the Office of the Assistant Secretary of Defense (Special Operations and Low Intensity Conflict). The committee has also advocated a robust level of funding for these important forces.

As the threat of a Warsaw Pact invasion of Western Europe declines, the committee believes that the role of special operations forces will become even more significant than in the past. These forces are an ideal example of the lighter, more lethal, more mobile units that the United States will require in order to respond to regional contingencies and unconventional warfare outside the European theater.

In December 1989, Operation Just Cause in Panama demonstrated the flexibility of special operations forces. They carried out a variety of demanding missions, from the seizure of airfields to the rescue of prisoners. Although they were successful in achieving their objectives, they did encounter some problems that the committee believes should be resolved with additional funding.

The committee recommends a package of funding initiatives that would correct several operational deficiencies experienced by special operations forces in Operation Just Cause. The package would also fund some high-priority procurement and research and development projects that directly contribute to U.S. special operations capabilities.

The package recommended by the committee amounts to $113.3 million and is comprised of three parts: (1) $81.9 million in procurement funding; (2) $25.3 million in research and development funding; and (3) $7.1 million in operation and maintenance funding. The R&D and O&M activities that would receive additional funds are described in titles II and III of this report. The following are the procurement activities that are included in the committee's package:

1. *AC-130 gunship munitions ($20.3 million)*—These funds would procure additional 25mm ammunition, 105mm ammunition, and fuzes for the guns on AC-130 gunship aircraft.
2. *Refueling capability for HC-130 tankers ($14.7 million)*—This initiative would modify 10 HC-130 tanker aircraft to enable them to be refueled by other tanker aircraft.
3. *Special operations vehicle for Rangers ($2.5 million)*—These funds would purchase 50 new vehicles, spares, and special equipment to replace the Ranger Regiment's obsolete M151, one-quarter ton vehicles. For the selection of a replacement vehicle, the committee directs the Ranger Regiment to thoroughly consider modifying the vehicle to meet its operational requirements. In addition, the committee expects that commercial vehicles of the appropriate size and type manufactured in the United States will be seriously considered for the replacement vehicle.
4. *Radios for Rangers ($1.2 million)*—These funds would procure 65 LST-5 SATCOM (satellite communications) radios for the Ranger Regiment.

5. *Non-standard ammunition ($5.2 million)*—This initiative would reduce a shortfall in .50 caliber, 7.62mm, and rocket ammunition for Army special operations forces.

6. *Coastal patrol boats ($28.0 million)*—These funds would continue the procurement of coastal patrol boats by purchasing two more boats in fiscal year 1991.

7. *Submarine conversions for dry-deck shelters ($10.0 million)*—This initiative would provide the initial increment of funding for the accelerated conversion of two ballistic missile submarines. These submarines would be from the latest class of retiring SSBNs (SS–640 class) and would be modified to carry dual dry-deck shelters for special operations forces. The committee believes that planning should begin as expeditiously as possible to replace the dual dry-deck shelter submarines currently in operation (U.S.S. *John Marshall* and U.S.S. *Sam Houston*) with a like capability. Any gap in capability between the retirements of the currently operating dual dry-deck shelter boats and equally capable replacements should be minimized.

CHEMICAL DETERRENT PROGRAMS

Context for Committee Recommendations

The committee's consideration of the fiscal year 1991 amended budget request for chemical deterrent programs took place against the backdrop of conflicting trends in the area of chemical weapons (CW). On the one hand, there have been a number of positive developments both in arms control and as a consequence of the extraordinary events over the last year in Eastern Europe and the Soviet Union. At the same time, there are worrisome developments in the area of CW elsewhere in the world, particularly in the Middle East. Moreover, the threat of CW use is increasingly being magnified by the spread into the Third World of ballistic missile technologies and other means of delivering these weapons of mass destruction at long ranges.

On June 1, 1990, President Bush and President Gorbachev signed a bilateral agreement that would ban further CW production by either nation upon entry into force of the accord. The bilateral CW agreement also would require by the end of 2002 the destruction of the bulk of each country's CW stocks to equal, low levels. The agreement will be submitted to Congress for its approval, either as a treaty or an executive agreement, once an accompanying document on verification is completed by the two nations later this year. The committee will carefully review this proposed agreement in hearings next year.

The implications for the U.S. CW posture of the greatly diminished threat of a Warsaw Pact conventional attack against NATO are also profound. As the Warsaw Pact has ceased to exist as an effective military alliance and the threat of a Soviet "go it alone" attack appears to have receded in parallel, U.S. requirements for conventional forces in Europe have been reduced, with concommitant reductions in our requirement for NATO-oriented inventories of chemical retaliatory munitions and chemical protective equipment.

Production of Binary Chemical Munitions

Due to some remaining problems with the manufacture of a key component of the 155mm binary projectile and the Army's inability to contract for reliable supplies of a chemical agent needed to prove out and operate the new 155mm chemical agent production facility at Pine Bluff, the Secretary of the Army has been unable to submit the certification required under section 171 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 to release the $47 million provided by the Congress for this program last year. Certain problems also persist with the other binary production program, the Bigeye bomb. In April 1990, the committee was advised that due to problems in the prime contractor's management of subcontractor vendors, the schedule for additional operational testing (OT-2C) of the Bigeye had slipped several months and would not begin until fiscal year 1991. Assessments of the results of these tests from the DOD office of Operational Test and Evaluation and the General Accounting Office required pursuant to section 116 of the National Defense Authorization Act for Fiscal Year 1989 would not be available to the committee until next spring at the earliest.

On July 5, 1990, the committee was advised that in light of the new U.S./Soviet CW agreement, Secretary Cheney had decided that production funding for both programs was no longer required for fiscal year 1991. The committee concurs in this decision and recommends that no funds be provided in fiscal year 1991 for the procurement of the 155mm binary artillery projectile or the procurement of the Air Force or Navy Bigeye binary bomb.

Engineering Development of MLRS Binary Munition

Due to severe budgetary constraints, the committee cannot justify the expenditure of $27.8 million in fiscal year 1991 funds to develop a new binary chemical munition whose production will be banned under the terms of the U.S./Soviet CW agreement if that agreement is approved and entered into force. Accordingly, the committee recommends that no funds be provided in fiscal year 1991 for the engineering development of the MLRS binary munition. However, the committee recognizes that the availability of the technical data package (TDP) for this binary CW round would provide a useful hedge should extraordinary events jeopardize U.S. supreme interests and necessitate a U.S. withdrawal from the bilateral CW agreement pursuant to Article X of that accord. The committee therefore invites the Defense Department to submit a reprogramming request to use whatever portion of the $47 million in unobligated fiscal year 1990 155mm binary round production funds is required to complete the TDP for the MLRS binary round.

Production Facilities

Consistent with Secretary Cheney's recent decision to lay away binary production capabilities and equipment as a further hedge against any future scenario which necessitated a resumption of U.S. binary production, the committee invites the Defense Department to submit a reprogramming request to use other portions of the unobligated $47 million in fiscal year 1990 155mm binary production funds for this purpose.

Retention of Unitary CW Munitions

The committee notes that if the June 1 bilateral CW agreement is approved by the Congress next year and entered into force by the two nations, the combination of the restrictions in the agreement, particularly the ban on further CW production, and restrictions on the U.S. CW program presently established under domestic legislation would in all likelihood result in an overwhelming Soviet superiority in this area.

In light of Secretary Cheney's decision not to request production funding for binary munitions in fiscal year 1991 and to halt all production activities at an early date, the current requirement in law for destruction of the entire stockpile of existing unitary CW munitions and agents by 1997 will, unless amended, leave the United States with an extremely modest CW inventory—one that is measured in hundreds of agent tons, not thousands. Assuming complete destruction of the unitary stockpile, the final U.S. binary level will be only a small fraction of the amount retained by the Soviet Union after it reduces to the 5,000 agent ton limit for declared stocks established under the bilateral agreement.

This asymmetry could, of course, be superseded and eliminated through the entering into force of an international treaty providing for the complete destruction of all CW stocks. However, it is not clear whether the Geneva negotiations on such a convention will be successfully concluded.

Under section 1412 of the Department of Defense Authorization Act for Fiscal Year 1986, as amended by section 118 of the National Defense Authorization Act for Fiscal Year 1989, the United States must by April 30, 1997 destroy its entire inventory of existing unitary CW stocks. However, the fiscal year 1986 legislation provides an exemption under which up to 10 percent of the current unitary stockpile could be maintained "in the event of a declaration of war by the Congress or of a national emergency by the President or the Congress or if the Secretary of Defense determines that there has been a significant delay in the acquisition of an *adequate* number of binary chemical weapons to meet the requirements of the Armed Forces." (emphasis added)

The committee has learned that in the wake of the signing of the U.S./Soviet CW agreement, the Defense Department is giving serious consideration to invoking the "significant delay" clause in this exemption provision in order to reduce the U.S./Soviet asymmetry which otherwise will result and to maintain certain unitary CW munitions for which binary CW replacements will not be forthcoming (e.g., unitary CW bombs) if the bilateral CW agreement is approved by the Congress and enters into force.

Although the committee is concerned by the deficiencies in the U.S. CW posture which could result from the combined effect of the termination of the binary production programs and the destruction of all existing unitary munitions, it would strongly oppose any attempt by the Defense Department to invoke section 1412 of the Department of Defense Authorization Act for Fiscal Year 1986 to mitigate the effect of the June 1 U.S./Soviet CW agreement. The 10 percent exemption clause was not intended by the Congress as a way to retain unitary CW stocks in the event the President signed an agreement banning all production of chemical weapons. Rather, it was intended by the Congress to put in place a streamlined procedure for responding to a national emergency or for redressing a situation in which a "significant delay" in acquiring an adequate binary CW stockpile resulted in the demilitarization timetable for the unitary CW stocks getting far in front of the binary CW production schedule.

The committee also notes that on February 1, 1990, Secretary Cheney submitted a certification to Congress pursuant to section 172 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 to obtain release of funds required for the German CW retrograde program. In this certification, the Secretary stated that "an *adequate* United States binary chemical munitions stockpile will exist before *any* withdrawal of the existing stockpile from its present locations in Europe is carried out." (emphasis added) This retrograde operation began in July and should be complete by September.

If the President, with the advice of the Secretary of Defense and the Joint Chiefs of Staff, determines that the June 1 U.S./Soviet CW agreement has created a military requirement for retaining selected portions of the existing unitary CW stockpile due to the banning of binary production, the committee recommends that that determination be transmitted to the Congress, together with a proposed amendment to section 1412 of the Department of Defense Authorization Act for Fiscal Year 1986, at the same time, or before, the bilateral CW agreement and its accompanying document on inspections are submitted for approval. The committee would in principle be inclined to support such an amendment in light of the apparent Soviet advantage in chemical weapons that will remain if the bilateral CW agreement is implemented. However, specific factors would have to be taken into consideration, including:

(1) Safety: The committee notes that the binary production program was proposed to the Congress largely on the basis that the existing unitary stockpile was, or in some cases will soon be, unsafe. Therefore, it would carefully consider any proposal to retain unitary weapons based on their safety, both at present and over the expected duration of their proposed retention.

(2) Chemical demilitarization plan: The committee would examine the advisability of storing certain unitary munitions indefinitely at locations at which plans for construction of on-site destruction facilities have been presented to the local communities based on assurances that all unitary CW munitions at those sites would be destroyed. An additional factor for consideration would be the feasibility and cost of operating a chemical demilitarization facility (or facilities) to destroy a portion of the stocks at a selected location or locations, putting the facility in mothballs upon completion of this phase of the demilitarization plan, and then restarting the operation when and if a decision is made to destroy the unitary CW munitions that had been selected out for retention.

(3) Recertification of unitary CW munitions: On July 5, 1990, the Defense Department advised the committee that in light of the bi-

lateral CW agreement banning further binary CW production, the Services need $10 million in fiscal year 1991 RDT&E funds and up to $20 million in fiscal year 1992 to certify certain unitary CW munitions, such as chemical bombs, for delivery by modern weapons systems. The committee believes that any decision on spending funds for this purpose should be addressed in the context of a broader proposal by the President to revise current law to allow retention of certain unitary CW weapons for an indefinite duration.

Chemical Demilitarization Program

The June 1 bilateral CW agreement requires each party to begin its destruction of chemical weapons by not later than December 31, 1992, with destruction of the bulk of each country's declared CW stockpile to be completed by the end of 2002. Effective December 31, 2002, neither side may maintain CW stockpiles in excess of 5,000 agent tons. For the United States, this means a reduction of about 80 percent of the CW inventory it declared in the December 29, 1989 data exchange; for the Soviet Union, it represents a reduction of 90 percent of its declared stockpile. In addition, the bilateral agreement requires that by the end of 1999, each party must have destroyed at least 50 percent of its declared stockpile.

The committee also notes that the schedule for CW munitions destruction established in the June 1 bilateral agreement and the schedule currently binding on the United States under domestic legislation are inconsistent. Under the bilateral agreement, the United States has at least five additional years to complete required chemical demilitarization activities. Furthermore, the bilateral agreement contains a provision inserted at the insistence of the United States which would extend the destruction timetable should either country experience problems that would prevent it from meeting the original timetable specified in the accord.

In May, the General Accounting Office released a report which concluded: "The Army's estimates to complete the on-site CW disposal program have doubled since 1985—from $1.7 billion to over $3.4 billion—and will likely continue to escalate." Furthermore, the committee was advised by the Army in December 1989 that "a delay in the overall program schedule is now probable." In testimony in April 1990, the Army recommended that the congressionally-mandated deadline of April 1997 for the chemical demilitarization program be extended until December 1998.

The committee considered recommending changes to current legislation to reflect recent delays in the chemical demilitarization program and to set new timetables in conformity with the schedule spelled out in the June 1 U.S./Soviet agreement. However, the committee concluded that it would be unwise to adjust the chemical demilitarization timetable as currently established in law before the bilateral CW agreement is submitted. Should the agreement be approved next year, the committee will consider appropriate revisions in U.S. law in the course of its action on the fiscal year 1992 defense authorization bill, as well as the implications of a more relaxed chemical demilitarization timetable for other disposal approaches, such as the cryofracture technology.

Chemical Protective Equipment

The committee recommends that no funds be provided in fiscal year 1991 for procurement of the "Fox" NBC reconnaissance vehicle. Although this vehicle is highly capable and would provide the Army with a CW system fully interoperable with West German systems, the committee is not persuaded that the Army is committed to procuring a sufficient quantity of vehicles in the years ahead to justify the costs of establishing a training and logistics base for the system.

CLOSE AIR SUPPORT DEADLINE EXTENSION

The committee has learned that a certification by the Secretary of Defense, required by the National Defense Authorization Act for Fiscal Years 1990 and 1991, has unduly restricted fixed-wing training flights at the National Training Center at Fort Irwin, California.

The intent of the requirement, which in part specified that any fixed-wing aircraft operating at the National Training Center after July 1, 1990 would be fully integrated into the range instrumentation system to the same extent as attack helicopters, was to encourage incorporation of the instrumentation necessary to achieve fixed-wing integration in an expeditious manner.

Subsequently, the committee, while continuing to support the timely integration of instrumented fixed-wing aircraft, has been made aware of circumstances which have made the July 1, 1990 deadline an overly optimistic requirement. The committee therefore extends the date by which all fixed-wing aircraft participating in exercises at the National Training Center must be fully integrated into range instrumentation to January 1, 1993. The requirement that such integration must be to the same extent as attack helicopters remains.

TITLE II—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The recommendations of the committee for the research, development, test and evaluation of various defense weapons and equipment appear in this title of the report.

EXPLANATION OF TABLES

The tables in this title display items requested by the administration for fiscal year 1991 for which the committee either increased or decreased the requested amounts. Items that are not displayed have been approved by the committee in the amounts requested in the Department of Defense's amended budget justification documents. As in the past, the administration may not exceed the amounts approved by the committee (as set forth in the tables or, if unchanged from the administration's request, as set forth in the Defense Department's amended budget justification documents), without a reprogramming action in accordance with established procedures.

ADDITIONAL TESTING OF STEALTH VEHICLES AND FLEET AIR DEFENSES

The committee has expressed its strong interest in vigorous testing of our newly developed stealthy air vehicles against existing air defense systems, both as validation of achievements in the stealth arena, and as a basis for stressing and determining the need for improving U.S. air defense systems. We are aware that some testing has taken place against land, sea, and airborne sensors, representing both United States and simulated enemy radars. The results form the basis for mission planning, for the employment of stealthy vehicles in attacking land targets, and assessment of the probable results of such employment, including penetration through heavily-defended enemy territory.

The committee believes further testing is warranted. The technology of U.S. low observable vehicles is likely to become available to potential adversaries over time. Now is the time for an increased emphasis on careful testing of the capabilities of current U.S. air defenses against the future stealth threat. If current defenses are determined to be unacceptably vulnerable to the threat of stealthy air-to-surface missiles or stealthy aircraft (or both), then the Services will have adequate lead-time to develop improvements to air defense systems prior to the emergence of such a threat in adversaries' inventories. This is more than an issue of detection of stealth aircraft or missiles; successful defense requires detection, tracking, engagement, fuzing, and lethal destruction of attackers.

Therefore, the committee encourages the Secretary of Defense to ensure that a vigorous, Service-wide test program be pursued. In addition to testing the detection capabilities of air defense sensors, this testing also should require examining the capability of U.S. air defenses to track, engage, fuze, and destroy a stealthy airborne attacker. Such testing should be carefully structured to provide data and insights for both cued and uncued defenses, and for the effects of various environmental conditions, such as weather, that might influence the results. In the absence of the availability of supersonic, stealthy air-to-surface missiles, test results utilizing surrogate missiles should be extrapolated to evaluate the capabilities of U.S. air defenses against the combination of high-speed and low observable missiles. The committee expects to be informed at regular intervals of the progress and results of these tests.

Should funds be required for special test activities during fiscal year 1991, the Services are authorized to use such operation and maintenance funds as may be required. Funding for this test activity for fiscal year 1992 should be identified in the defense budget request for fiscal years 1992 and 1993.

INCREASED USE OF SIMULATORS

For the past 40 years, U.S. military units and personnel have maintained combat and organizational proficiency through extensive training and field exercises. Some of those exercises involved tens of thousands of military personnel. While that training activity has become very expensive, it was judged essential in order to sustain high readiness levels.

The Department of Defense is entering a new period of constraints and opportunities. The reduction in tensions in Europe no longer permits nor requires large-scale military maneuvers. Other types of training activity—such as low level tactical aircraft flight operations—are now considered too "intrusive" of domestic life, and these types of activity have been substantially curtailed. This is paralleled by heightened pressure on the defense budget and the need to scale back activities across the board.

At the same time, U.S. technological innovation is providing opportunities for training through the use of simulators to mitigate the effects of tighter budgets and reduced public acceptance. Indeed, some activities today—such as electronic warfare jamming—are conducted primarily through simulation because of the disruptive effects that jammers could have on the domestic economy.

The committee is convinced that the future demands expanded use of advanced simulators in order to enhance proficiency training without employing expensive field training. Advance simulation technology and approaches offer the possibility of conducting simulations on the very equipment that will be used in wartime, especially in the area of command and control. The committee has recommended several programs consistent with this expanded emphasis on the simulation of combat and organizational training. Those programs are described in greater detail in the appropriate sections of the committee report.

SOLDIER/MARINE ENHANCEMENT PROGRAM

Last year, the committee initiated a program to improve the equipment available to Army and Marine Corps infantrymen. The committee concluded that the effectiveness of foot soldiers could be significantly increased through more aggressive efforts to identify and procure more lethal infantry weapons and improved "soldier items," including lighter, more comfortable load-bearing equipment, field gear, survivability items, communications equipment, and navigation aids. The committee particularly notes that some of the "lessons learned" for Panama clearly apply in this area.

In general, the committee is gratified by the positive attitude of the Army and the Marine Corps in utilizing the funds provided by this initiative to accelerate certain programs for infantrymen. More importantly, many proposals from industry were brought to the attention of the committee as potential examples of items well suited to evaluation under the Soldier/Marine Enhancement Program. Nevertheless, the recent operation in Panama again points out that the Army and Marine Corps have not given sufficient attention to the equipment needs of infantrymen, and the committee continues to question the lack of progress on the part of the Army in fielding cold weather gear. The committee is convinced that this program is more important in this new period where greater reliance will be placed on infantry forces. Consequently, the committee recommends an authorization of $18 million for the Army and $12 million for the Marine Corps to continue the test and evaluation of promising items of equipment for infantry forces. The committee again emphasizes that these funds should be used primarily to test and evaluate existing items of equipment rather than launch lengthy development efforts.

R-1 Line	PE	Program	Amended FY 1991 Request	Senate	
				Change to Request	Authorized
		ARMY RESEARCH & DEVELOPMENT CHANGES			
4	62120A	ELECTRONIC SURVIVABILITY & FUZING TECH	24,897	2,000	26,897
5	62122A	SURVIVABILITY ENHANCEMENT	6,285	5,000	11,285
9	62303A	MISSILE TECHNOLOGY	27,153	10,000	37,153
15	62624A	WEAPONS AND MUNITIONS TECHNOLOGY	36,866	20,000	56,866
16	62705A	ELECTRONICS AND ELECTRONIC DEVICES	17,608	2,000	19,608
17	62709A	NIGHT VISION TECHNOLOGY	19,285	1,000	20,285
19	62720A	ENVIRONMENTAL QUALITY TECHNOLOGY	9,815	2,000	11,815
21	62782A	COMMAND, CONTROL, COMMUNICATIONS TECH	20,458	2,000	22,458
22	62783A	COMPUTER AND SOFTWARE TECHNOLOGY	5,073	2,000	7,073
51	63742A	ADVANCED ELECTRONIC DEVICES DEVELOPMENT	5,640	2,000	7,640
993		STRATEGIC CLASSIFIED	88,268	(65,709)	22,559
66	63639A	ARMAMENT ENHANCEMENT INITIATIVE	[ ]	10,000	[ ]
90	64220A	ARMY HELICOPTER IMPROVEMENT PROGRAM	25,817	(25,800)	17
91	64223A	LIGHT ARMED SCOUT HELICOPTER	411,357	(150,000)	261,357
103	64630A	M1A1 DEVELOPMENT PROGRAM	46,337	(36,300)	10,037
107a		CCTT/SIMNET- RESERVE COMPONENTS		100,000	100,000
115	64770A	JOINT SURV/TARGET ATTACK RADAR SYSTEM	45,833	(7,600)	38,233
118	64802A	WEAPONS AND MUNITIONS - ENG DEV	11,106	13,000	24,106
119	64803A	CHEMICAL SYSTEMS - ENG DEV	27,806	(27,806)	
127	64813A	TRACTOR PULL	35,149	20,000	55,149
128	64814A	SENSE & DESTROY ARMAMENT MISSILE-ENG DEV	105,507	20,000	125,507
129	64815A	TRACTOR TRAILER		5,200	5,200
130	64816A	LONGBOW - ENG DEV	159,057	(48,000)	111,057
130a		APACHE RELIABILITY ENHANCEMENT PROGRAM		30,000	30,000
130b		LH ALTERNATIVES		18,000	18,000
135	64821A	FOLLOW-ON LANCE ENGINEERING DEVELOPMENT	112,228	(112,228)	
145	23801A	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT	40,817	30,000	70,817
		SOLDIER/MARINE ENHANCEMENT PROGRAM		18,000	18,000
994		TACTICAL CLASSIFIED	549,623	20,000	569,623
		ARMY MILSTAR TERMINALS		(16,000)	(16,000)
159	65301A	ARMY KWAJALEIN ATOLL	180,033	(17,177)	162,856
161	65601A	ARMY TEST RANGES AND FACILITIES	229,891	(9,891)	220,000
162	65602A	ARMY TECH TEST INSTRUMENT AND TARGETS	88,484	(13,484)	75,000
165	65702A	METEOROLOGICAL SUPPORT TO RDT&E ACTIV	24,395	(1,257)	23,138
169	65801A	PROGRAMWIDE ACTIVITIES	93,249	(4,360)	88,889
171	65803A	TECHNICAL INFORMATION ACTIVITIES	7,658	(1,800)	5,858
175	65894A	REAL PROPERTY MAINT ACTIVITIES - RDT&E	222,764	(23,558)	199,206
176	65896A	BASE OPERATIONS - RDT&E	204,360	(12,860)	191,500
177	65898A	MANAGEMENT HQ (RESEARCH & DEVELOPMENT)	15,297	(839)	14,458
178	78011A	INDUSTRIAL PREPAREDNESS	26,708	(26,708)	
		TOTAL RDT&E ARMY	6,025,900	(269,177)	5,746,723

ARMORED SYSTEM MODERNIZATION

The amended budget request includes $331.6 million in multiple program elements to continue development of the Armored System Modernization (ASM) program. The ASM program would field a new generation of heavily armored combat vehicles based on a common chassis.

Last year, the committee expressed its serious reservations about the program (then called the Heavy Forces Modernization program). The committee noted that there were troubling inconsistencies in the program and a disproportionate emphasis on one element of the program—a new tank—at the expense of all other vehicles. The committee questioned the Army's rationale that it had to modernize the tank to stay ahead of Soviet modernization efforts, when the Army did not believe it needed to make comparable efforts on behalf of infantry fighting vehicles or artillery where current U.S. capabilities lag far behind Soviet capabilities.

The National Defense Authorization Act for Fiscal Years 1990 and 1991 authorized the program, but limited obligation of funds until the Department of Defense had reviewed the program and completed certain studies and evaluations. To date, none of that has occurred. In the meantime, the Army has decided it no longer needs tank production capabilities and has proposed to remove half of the heavy tank divisions in the active Army.

These fundamental uncertainties led the committee to conclude that while it does support development of a common chassis, it cannot support the Army's proposal to proceed with full-scale development of a new tank cannon at this time. Proceeding with full-scale development will lock the Army into conventional gun technologies at the expense of more promising advanced technologies. The committee recommends a provision (sec. 215) that would prohibit the Army from proceeding with full-scale development of the Advanced Tank Cannon System.

The committee understands the Army's rationale for the common chassis approach to future modernization efforts. The committee questions, however, the internal priorities of the Armored System Modernization. The entire program is focused on the fielding of a new tank. The artillery component of the ASM program is effectively deferred until the turn of the century. During the past 2 years, as the Soviet Union has withdrawn large numbers of tanks from its forward-stationed divisions, it has substantially increased artillery forces. These changes have largely negated the combat loss of 5,000 front line tanks. Obviously, the Army's priorities in the ASM program should reflect the much more pressing need to field a new generation artillery system than a new tank.

The committee supports continued development of the common chassis, and recognizes that a new tank will need to be developed in the future. But the committee has concluded that deficiencies in artillery are more pressing, and believes the ASM program should be restructured to emphasize a new artillery system first, and a new tank and fighting vehicle later.

KINETIC ENERGY MISSILE

The committee has long supported the Army's efforts to field a kinetic energy missile (KEM), though progress to date has been disappointing. The theoretical promise of hypervelocity missiles is unquestioned. The practical reality of fielding them under the current program is uncertain. The committee understands that there are alternative technical approaches to hypervelocity missiles that are not being pursued because of the singular attention to the ongoing kinetic energy missile program.

The committee is persuaded that the theoretical promise of hypervelocity missiles, and the current uncertain prospects of the ongoing program, justify a broadening of the technical approaches and designs for kinetic energy missiles. Therefore, the committee recommends an increase of $10 million for the Army's Missile Technology program.

ELECTROMAGNETIC/ELECTROTHERMAL GUN TECHNOLOGY

Last year, the committee encouraged the Army to accelerate its efforts to demonstrate the potential of electromagnetic and electrothermal gun technology for tank and artillery applications. The Army conducted a series of tests that demonstrated the theoretical potential of electrothermal gun technology. But those tests also revealed substantial areas of technical and engineering uncertainty in turning that technology into weapons.

Last year, the Army was arguing that it had to field a new generation tank by 1997 because of the pace of modernization in the Soviet/Warsaw Pact threat. That modernization schedule effectively precluded the introduction of electrothermal guns. The developments of the past year have removed the urgency to meet an artificial deadline. The committee believes that there is now time to incorporate the most promising technology in the next tank and artillery system.

For those reasons, the committee recommends an increase in authorization of $20 million to continue research and development on electrothermal gun technologies.

ARMY HELICOPTER IMPROVEMENT PROGRAM

The Army has initiated a program to install anti-armor missiles on its OH-58D scout helicopters. The capability would only be installed on those helicopters that have undergone modification under the Army Helicopter Improvement Program (AHIP). The amended budget request includes $25.8 million in research and development and $34.8 million in procurement for fiscal year 1991 for the armed AHIP program. The amended budget request also includes $4.2 million to continue the air-to-air Stinger integration under the OH-58 modification program.

The committee notes that the purpose of the armed AHIP program is to expand the number of helicopters that can launch Hellfire missiles, yet the Army intends to terminate any further production of Hellfire missiles. Since the Army already has an insufficient number of Hellfire missiles to outfit the existing AH-64 fleet, there is little point in proceeding with armed AHIP. Consequently, the committee recommends that the armed AHIP program be terminated and that the air-to-air Stinger program be suspended.

LIGHT HELICOPTER

The amended budget request includes $411.4 million for the Army's Light Helicopter (formerly LHX) program. The Army also proposes to initiate full-scale development with these funds after the best overall design is selected from the two competing teams in January 1991.

The future Army will be substantially smaller. The committee understands that a smaller Army must compensate with mobility and survivability if it is to confront the range of warfighting requirements. Helicopters are a key component to mobility for the Army in the future and are equally applicable to low intensity conflict and large-scale conventional warfare. The committee also notes that the Army's current helicopters, and especially light helicopters, are unacceptably vulnerable in light of improving air defenses. The committee believes a long-term modernization program is justified.

The committee does not believe, however, that the Defense Department or the Congress have sufficient information to commit to full-scale development of the LH program at this time. The selection of the best overall design is strictly a paper competition. The Army indicated that it would have preferred a hardware prototype phase but did not believe it could afford it or take the time required to carry it out.

The reduction in the Soviet threat now permits a return to a "fly before buy" strategy. The committee believes that a prototype phase for the winning design would substantially improve the Army's understanding of cost and performance, which is critical for a $42 billion program.

The committee recommends an authorization of $261.4 million, but does not authorize the Department to initiate full-scale development of the winning design. Instead, the committee directs the Army to expend the funds on a flying prototype of the winning design. The committee does not envision a lengthy or extensive prototype phase, but does believe that a flying prototype and early operational testing will be critical to support full-scale development of a new generation of light helicopters.

This additional prototype phase will also permit the Department of Defense to evaluate product improvements to existing helicopters which should also be considered prior to a decision to launch full-scale development.

The committee also believes that the Department needs to evaluate upgrades to existing helicopters before it proceeds with full-scale development of the Light Helicopter. In order to fund the appropriate studies and analyses, the committee recommends an authorization of $18.0 million in the AH-64 program element for fiscal year 1991. Such funds shall be used to study and evaluate improvements to the AH-64 and OH-58D helicopters. If the LH program is terminated or proves unaffordable, the Department is invited to submit a reprogramming request to transfer the funds for advance procurement for continued production of AH-64 helicopters.

STINGRAY

For several years, the committee has promoted the development of Stingray as a means of substantially improving the combat effectiveness of existing weapon systems. In the past year, the Army has conducted yet further tests and has concluded that Stingray does hold substantial potential for dramatically improving the survivability and combat effectiveness of existing weapon systems. The Army has included funds in the amended budget request to initiate full-scale development, but the level of funding is insufficient and will unnecessarily delay full-scale development. Consequently, the committee recommends an increased authorization of $20.0 million and directs the Army to ensure that the program is sufficiently funded in the upcoming Six Year Defense Program to permit fielding on the fastest practical schedule.

DISTRIBUTED TRAINING SYSTEM FOR RESERVE COMPONENTS

The Defense Advanced Research Projects Agency has successfully developed the so-called SIMNET distributed simulation system. The SIMNET system fields relatively inexpensive simulators and links them electronically so that individual simulators can "fight" together against opposition forces that are similarly composed of linked simulators.

The committee believes that this type of simulator technology is precisely what is required for future training. Because restricted budgets and public accessibility will limit the amount of field training exercises, combat training fought "electronically" will prove to be an invaluable complement to ongoing training programs, and an increasingly large element of overall training programs.

The committee also believes that this technology is uniquely well suited to National Guard and Army Reserve units. National Guard and Army Reserve battalions are rarely given the opportunity to go to the field in detailed training against opposition forces, yet this is precisely the kind of training that is required for today's sophisticated combined arms battlefields. SIMNET has proven to be such a success that it has effectively opened new opportunities for training that previously existed exclusively through field exercises.

While SIMNET has proven to be very effective, the system does not meet Army requirements in certain important areas. The Army has launched a new program called Close Combat Tactical Trainer (CCTT) which builds on the SIMNET concept but attempts to correct shortcomings in the current system.

The committee welcomes the Army's efforts to promote the use of distributed simulation, but finds aspects of the CCTT program troubling. The Army envisi6ns a glacial pace for development of CCTT, fielding the first elements in 1996 or 1997. Such a schedule is incredible when compared to commercial practices which field entirely new computer systems within 3 years. The schedule is even more perplexing, since the Army would be building on a very successful demonstration project of the technology.

The committee believes it is not necessary to develop to perfection all elements of simulation before simulators are installed. Indeed, the SIMNET system has undergone continual evolution and expansion. The CCTT program should be configured to establish a flexible architecture and set of protocals initially, with an orderly expansion of fidelity and complexity in simulation over time.

In order to accelerate the introduction of distributed simulation to the Reserve components, the committee recommends an authorization of $100 million. The committee directs the Army to develop a plan that would field CCTT/SIMNET simulators by fiscal year 1992 based on competitive procurement procedures. The CCTT simulators for platoon and company training should be complemented by Family of Simulations (FAMSIM) systems to meet battalion, brigade, and division simulation requirements. The committee notes that the 35th Infantry Division at Ft. Leavenworth, Kansas, has done an excellent job of introducing FAMSIM capabilities, and commends it as a model to the Army for other Reserve component units.

MULTI-PURPOSE INDIVIDUAL MUNITION

For several years, the Army has been conducting a proof-of-principle evaluation of candidate systems for the Multi-Purpose Individual Munition (MPIM). The committee believes that the emphasis on light infantry forces in the future justifies a more aggressive program to field an improved multi-purpose munition. However, the committee notes that for the past 3 years, the Army has not requested funding for this program. The committee questions the value of the system if the Army is not prepared to fund its development.

The program is nearing the point where it should enter full-scale development. The committee recommends an authorization of $13.0 million to initiate full-scale development. However, the committee directs that none of those funds be obligated until the Secretary of Defense authorizes the Army to initiate full-scale development of the winning design in the MPIM competition, and that the Six Year Defense Program earmarks sufficient funds to complete full-scale development.

SENSE AND DESTROY ARMOR

The amended budget request includes $105.5 million to continue the development of the Sense and Destroy Armor (SADARM) program. SADARM will develop self-guiding and fusing submunitions for 155mm artillery projectiles and Multiple Launch Rocket System (MLRS) rockets. SADARM holds the promise of giving relatively inaccurate artillery systems pinpoint accuracy to destroy hardened targets.

While improved accuracy is obviously of great benefit, even more significant is the implication this holds for logistics requirements in the Army. Modern artillery systems can fire thousands of tons of ammunition over very short periods. Transporting artillery ammunition has become a major burden for Army logistics units. While unguided artillery rounds have become more effective, providing terminal guidance offers the promise of reducing consumption rates by as much as 1,000 percent. A ten-fold reduction in artillery consumption obviously makes the Army substantially more transportable and supportable.

Currently, the accuracy and lethality of the SADARM system is limited to stationary, lightly armored targets. It is possible, however, to upgrade SADARM to make it effective against moving armored targets. The committee believes the promise of this technology and the need to get weight out of Army divisions justifies an acceleration of the SADARM product improvement program. As such, the committee recommends an increase in authorization of $20 million to accelerate product improvements for SADARM.

ARMORED GUN SYSTEM

In the early 1980s, the Army indicated a requirement to procure a light mobile gun system for light infantry forces. Despite the requirement, the Army failed to develop or procure such a system. The recent military operation in Panama revealed the urgent need to field such a system. The Army "borrowed" light armored vehicles (LAVs) from the Marine Corps. The Sheridan tanks currently used by the XVIII Airborne Corps will not be supportable after the early 1990s.

Faced with this obvious deficiency, the Army is proposing to procure a new armored gun system. The Army has outlined operating requirements for such a system, but has testified that it will not develop a weapon. Instead, the Army intends to buy an "off the shelf" system that best meets the requirements among the potential vehicles that might be available. The Army's plan, however, is limited to procuring 70 vehicles to replace the Sheridan tanks in the XVIII Airborne Corps. The Army still has not decided how it will provide light armored direct fire weapons for other light divisions. If these light division are truly intended to be "strategic," as indicated by the Army, then modernization programs should be in place to increase their capabilities for a variety of applications.

Consequently, the committee recommends a provision (sec. 211) that would restrict the Army from proceeding with the new armored systems modernization program until a competition for an armored gun system has been initiated and certain milestones have been accomplished.

STANDARDIZED ARMY REFUELING SYSTEM

The Army has been examining a Standardized Army Refueling System (SARS) that would standardize refueling equipment and install vapor recapture devices. Such devices have been in use commercially for years for environmental and safety considerations. The committee commends the Army for pursuing the SARS system and encourages the Army to select the best technical approach through open competition and develop a plan for installation of these new components.

R-1 Line	PE	Program	Amended FY 1991 Request	Senate Change to Request	Senate Authorized
		NAVY RESEARCH & DEVELOPMENT CHANGES			
2	61153N	DEFENSE RESEARCH SCIENCES	374,357	(9,000)	365,357
11a	62XXXN	TACTICAL OCEANOGRAPHY TECHNOLOGY		5,000	5,000
15	62435N	OCEAN AND ATMOSPHERIC SUPPORT TECH	32,099	2,000	34,099
22	63573N	ELECTRIC DRIVE	43,799	50,000	93,799
22a		UNMANNED UNDERSEA VEHICLE TECHNOLOGY		4,000	4,000
27	63712N	GENERIC LOGISTICS R&D TECH DEMONSTRATION	14,040	5,000	19,040
42	11224N	SSBN SECURITY TECHNOLOGY PROGRAM	43,131	16,869	60,000
		SEALAR		20,000	20,000
		SUBMARINE LASER COMMUNICATIONS		10,000	10,000
84	63564N	SHIP DEVELOPMENT	18,864	30,000	48,864
134	64262N	V-22A		38,000	38,000
134a	64262N	V-22 PRIOR YEAR TRANSFER		[200,000]	[200,000]
137	64270N	EW DEVELOPMENT	146,689	6,500	153,189
141	64309N	SEA LANCE		71,000	71,000
143	64354N	AIR-TO-AIR MISSILE SYSTEMS ENGINEERING	26,487	(26,487)	
152	64373N	AIRBORNE MINE COUNTERMEASURES - ENG DEV		10,000	10,000
170a		ASSAULT BALLISTIC ROCKET SYSTEM		31,000	31,000
190	64761N	INTELLIGENCE	2,538	(1,000)	1,538
196	65853N	MANAGEMENT AND TECHNICAL SUPPORT	9,404	(1,355)	8,049
197	65867N	C2 SURVEILLANCE/RECONNAISSANCE SUPPORT	9,983	(533)	9,450
217	26623M	MAR CORPS GROUND COMBAT/SUPPORTING ARMS	43,725	12,000	55,725
		CLASSIFIED PROGRAM		5,000	5,000
		FEWSG AIRCRAFT COMPETITION		15,000	15,000
		DISTRIBUTED SIMULATION- NAVY RESERVE		10,000	10,000
998		TACTICAL CLASSIFIED	1,069,500	(13,800)	1,055,700
999		INTEL & COMMUNICATION CLASSIFIED	713,654	(387)	713,267
238	64255N	ELECTRONIC WARFARE SIMULATOR DEVELOP	39,577	(10,163)	29,414
250	65861N	RDT&E LAB & FACILITIES MANGT SUPPORT	59,655	(7,808)	51,847
252	65863N	RDT&E SHIP AND AIRCRAFT SUPPORT	85,257	(11,952)	73,305
253	65864N	TEST AND EVALUATION SUPPORT	345,929	(20,929)	325,000
259	78011N	INDUSTRIAL PREPAREDNESS	41,827	(38,827)	3,000
		TOTAL RDT&E NAVY	9,102,400	199,128	9,301,528

APACHE RELIABILITY ENHANCEMENT PROGRAM

The amended budget request contains $159.1 million to continue the development of the so-called Longbow fire control system upgrade for the AH-64 Apache helicopter. While the committee appreciates the mutually supporting roles intended for the future Army light helicopter and the AH-64 Apache, it is concerned that the planned Longbow upgrade for the AH-64 introduces sophisticated new equipment to an aircraft already experiencing maintenance and reliability difficulties in its present baseline configuration.

In order to fix these problems and improve the operating conditions for the Longbow upgrade, the committee directs the Army to establish an Apache Reliability Enhancement Program and earmarks $30 million of the funds recommended for the Longbow program in fiscal year 1991 to be available only for reliability and maintenance improvements to the existing AH-64 helicopter.

The committee supports the continued development of Longbow, but directs the Army to solve those problem areas degrading AH-64 reliability rates. The committee will not support the Longbow program next year if reliability problems persist in the AH-64 program.

TACTICAL OCEANOGRAPHY

The committee continues to believe that a better application of oceanographic science to anti-submarine warfare tactics will significantly benefit the national defense. The National Defense Authorization Act for Fiscal Years 1990 and 1991 included $3 million for initiating activities in this important area. The committee understands that the Navy intends to request funding for this program in the fiscal year 1992 budget but elected not to request funding in its fiscal year 1991 amended budget request. The committee provides an additional $5 million in exploratory development funding for fiscal year 1991 to insure continuity in this important program.

The committee notes that the information on the ocean environment gathered as a result of this and other Navy oceanographic data gathering activities can be of significant benefit to research on environmental change and global warming. The committee urges the Department of the Navy to actively pursue ways in which this type of information can be shared with these research activities in a way that is mutually beneficial to both.

INTEGRATED ELECTRIC DRIVE

The statement of managers accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (H. Rept. 101-331) directed the Secretary of the Navy to submit a report on integrated electric drive (IED) to the Committees on Armed Services of the Senate and the House of Representatives within 120 days of enactment of the Act. The report was to have included: (1) the assignment of a senior program manager; (2) a development and test plan supporting installation of such a system on a DDG-51 and delivering that system to sea before the year 2000; and (3) a plan for parallel development of superconducting technology.

The committee is disappointed that the Navy only submitted an interim report that provided no information. The committee understands that the Navy would prefer to proceed more cautiously than the direction in last year's statement of managers. The Navy apparently believes that it would be more prudent to install IED on a larger auxiliary and send that ship to sea for full scale testing before committing to put the system on a combatant. The committee is not opposed to evaluating this alternative, but finds it difficult to consider the alternatives when requested information is not provided.

The committee remains firmly committed to this key technology for future surface combatants and other naval platforms. The administration requested $43.8 million for the integrated electric drive program in fiscal year 1991. The committee recommends an additional $50 million be authorized, for a total of $93.8 million. These added funds would help deliver IED to sea in fiscal year 2001 on the second ship of a new class of AOE fast combat support ships.

UNMANNED UNDERSEA VEHICLE (UUV) TECHNOLOGY DEVELOPMENT

In 1990, the Navy provided to the Congress a report on "Developing Long-Endurance Unmanned Undersea Vehicles and Concepts for Handling Undersea Vehicles from Surface Combatants." The report was useful, and the committee notes that it made several recommendations. In particular, the report indicated the value of developing improved fuel-cell technology for use in unmanned undersea vehicles.

Consistent with the Navy's report, the committee recommends authorization of $4 million in the Navy RDT&E account for development of fuel-cell technology applicable for use in underwater propulsion, especially in UUVs.

RAPID ACQUISITION OF MANUFACTURED PARTS

The committee continues to support the application of modern technology to improving manufacturing processes in all areas. The Navy's rapid acquisition of manufactured parts (RAMP) program applies advanced computer integrated manufacturing techniques to reduce cost and production lead times associated with the manufacturing of a wide variety of mechanical parts and electronic printed circuit assemblies. The amended budget request for fiscal year 1991 contained no research and development funding to support this program. The committee believes that research and development should continue in this important area and adds $5 million to the Navy's generic logistics research and development technical demonstration project for this purpose.

SUBMARINE LASER COMMUNICATIONS

The committee is concerned about potential future vulnerabilities arising from SSBN communications systems. Also, the advent of low-frequency active acoustic detection and tracking systems will vastly increase the need for reliable, responsive, and covert means to communicate with submerged SSNs at relatively high data rates. Similar requirements exist for coordination between battle groups and escorting SSNs.

Laser communications technology, if successfully developed, appears to have the potential to solve these problems, but the amended defense budget request includes no funding to continue this technology program. Therefore, the committee recommends an authorization of $10 million for the Navy to continue development of laser communications technology. In addition, the committee expects the Navy to provide a detailed explanation of how the Navy intends to solve command and control issues arising from the introduction of low-frequency active acoustic systems in the justification for this program submitted in the fiscal year 1992–1993 budget request. Unless the Navy demonstrates it can solve these problems, the effectiveness of and the justification for the low frequency adjunct program is in doubt.

SSBN SECURITY PROGRAM

The committee continues to be disturbed by the turbulence introduced into orderly planning of research on anti-submarine warfare (ASW), particularly non-acoustic ASW research, by recent congressional actions and by the disinclination of the Defense Advanced Research Projects Agency to continue to sponsor and oversee a program of non-acoustic ASW research that has produced many interesting results, not all of which are well understood.

The committee regards as highly likely that the Nation will place increased reliance on our SLBM deterrent capabilities under START. However, the number of U.S. ballistic missile submarines will decline throughout the decade of the 1990s, as Poseidon submarines are retired more rapidly than Trident submarines are commissioned. This drawdown in the number of missile submarines in the inventory requires, in the committee's judgment, an expanded SSBN security effort to ensure that Trident submarines continue to remain virtually undetectable while on patrol. The SSBN security program has been funded at a declining level of effort throughout the decade of the 1980s. To reverse this trend in resources and to emphasize the committee's commitment to a robust non-acoustic ASW program, the committee has increased funding by $16.869 million above the request, to a level of $60 million for fiscal year 1991. The committee further expects the Navy to develop an enhanced funding profile for the fiscal years 1992-1997 Six-Year Defense Program for this program element.

SEALAR

As noted elsewhere in this report, the committee's longstanding concerns about U.S. space access capabilities are unabated. The Air Force has decided that a new booster development program oriented toward reduced launch cost is unaffordable at this time. In the committee's view, given the long-term budget outlook and the cost estimates for the Air Force's proposed next-generation booster, there is little reason to expect that the Air Force's proposed booster will ever be affordable.

The Naval Research Laboratory (NRL) has proposed a booster concept called Sea Launched and Recovery (SEALAR) that has the potential to reduce the cost of space access and improve operational responsiveness—for a fraction of the cost of the Air Force's Advanced Launch System.

The committee believes this concept merits serious investigation. For this reason, and consistent with the committee's constructive competition initiative, the committee proposes a competition between the Navy's SEALAR program and the Air Force's space booster programs to demonstrate a technically feasible, operationally sound, and affordable launch vehicle for military, civilian, and commercial applications.

The Navy has budgeted $2.5 million for this program in the amended fiscal year 1991 request. The committee recommends adding $20 million to the requested amount, for a total authorization of $22.5 million. The committee expects the Navy to request adequate funding for this program for fiscal year 1992 and beyond. The Navy is encouraged to seek industry participation and other partners in this technology development and demonstration program. The initial goal of the program should be to demonstrate by fiscal year 1993 the technical and economic feasibility of a sea-launched and recoverable space booster with a payload capacity of at least 10,000 pounds to low earth orbit. Key technical milestones include demonstration that an operational vehicle would require significantly reduced launch support; that recovery and re-use of first and second stages are possible and cost effective; and that pressure-fed engine technology can be scaled up to significantly larger boosters.

NAVY NON-ACOUSTIC ANTI-SUBMARINE WARFARE (NAASW)

The Administration requested $22.9 million in fiscal year 1991 for the Navy's non-acoustic anti-submarine warfare (NAASW) program. This reflects a restoration of funds to the Navy from the final position in the Department of Defense Appropriation Act for Fiscal Year 1990 that transferred funding and program management responsibility to the Office of the Secretary of Defense (OSD). The committee believes that the OSD program provides a useful vehicle for ensuring that funds are allocated for exploring all reasonable avenues of development. However, the committee also believes that removing all funding from the Navy's program would be inappropriate since: (1) ASW is of vital importance to the Navy, and (2) the Navy can make a useful contribution to the NAASW program. The committee is encouraged with the way the Navy has begun to implement the recommendations of the House Armed Services Committee ASW advisory panel. For the time being, however, the committee believes that this national program should be centrally coordinated.

The committee recommends authorization of $22.9 million in fiscal year 1991 for the NAASW program, but directs that the Navy and the OSD program managers coordinate their respective efforts to prevent any duplication.

SEALIFT TECHNOLOGY DEVELOPMENT

The committee added both research and development funds and advance procurement funds for the purpose of pursuing fast sealift alternatives in fiscal year 1990. Much has happened in the world environment since then, but the concern about lift capability remains. The conventional wisdom is that "fast" sealift may be somewhat less important now. It is not clear, however, what the net effect on lift requirements will be after evaluating the following substantial changes: (1) reductions in the overall threat, (2) increases in warning time, and (3) forthcoming troop withdrawals from Europe. With substantially reduced overseas deployments likely, and with overall reductions in the total forces available, it could well be that analysis will show that speed of delivery by sea will be at an even greater premium. Certainly, the results of the Defense Secretary's review of the C-17 airlift aircraft program indicate that the Department intends to acquire much less airlift capability than had been anticipated.

The committee recommends the authorization of an additional $30 million for the purpose of sealift technology development to complete the work of the technology development program described in the January 1989 report of the Secretary to the Congress entitled "Fast Sealift Program Technology Assessment Report." This development program preserves the option for choosing among various fast sealift alternatives should an updated Congressionally Mandated Mobility Study show a need for expanding our current capability. The committee designates the sealift technology development program a congressional interest item and funds provided shall not be diverted to or used for other purposes or reprogrammed without congressional approval.

V-22 TILT ROTOR AIRCRAFT

The Administration proposed to terminate further development or procurement of the V-22 tilt rotor aircraft in the fiscal year 1990 request. As a result of much deliberation in the Congress, the Congress decided to complete the research and development, to require the Secretary of Defense to conduct a study of the potential for the V-22 aircraft, and to submit a report to the Committees on Armed Services of the Senate and the House of Representatives within 6 months of the enactment of the National Defense Authorization Act for Fiscal Years 1990 and 1991.

There has been no credible argument that the Marine Corps does not need to begin a replacement program for its medium lift helicopter fleet. All of the discussion has centered on whether the V-22 alternative would be more or less affordable than other alternatives. The Defense Department has recently delivered draft copies of the Institute for Defense Analysis (IDA) study on the cost effectiveness of using the V-22 tilt rotor aircraft to fill the medium lift mission, versus a mixture of existing types of helicopters. Preliminary indications from this and other analysis are that the V-22 has the potential to be more militarily useful than the alternatives proposed by DoD and others.

The committee, however, notes that other study efforts directed in its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), and subsequently agreed to in conference, have been ignored.

(1) The Secretary of Defense was directed, in conjunction with the Secretary of Transportation and Administrator of the Federal Aviation Administration, to investigate the potential role of tilt rotor technology in commercial aviation.

(2) The contractors were challenged to demonstrate tangible signs of commercial interest in the V-22.

(3) The Secretary of Defense, in consultation with the Federal Aviation Administrator, was directed to survey the export potential of the V-22 and summarize efforts underway in other countries to develop tilt rotor technology.

(4) The Secretary of Defense was directed to examine arrangements for aircraft production that would guarantee quality, delivery schedules, and price in a budget environment where low levels of stable production must be affordable.

(5) The Secretaries of the Military Departments were directed to evaluate requirements in their Departments for the V-22 and submit a report summarizing their evaluations.

The committee continues to have substantial concerns about the flight safety, reliability, and maintainability of the existing fleet of H-46 aircraft. Nevertheless, the committee believes that it would be premature to commit to production of the V-22 aircraft. Recent testing has shown that there may be vibration problems to be solved. The committee also has concerns about whether the current V-22 configuration is compatible with the range of Marine Corps equipment that it would be required to carry. There are significant portions of the equipment complement of a Marine Corps assault echelon that cannot be carried internally in the V-22. Carrying loads slung under the aircraft can result in substantial limitations in flexibility and capability. Much of the effectiveness of the V-22 in the IDA study presumes that the speed capability of the V-22 is as good as advertised, both with and without external loads.

The committee recommends authorization of $238.0 million for continuing research and development of the V-22 tilt rotor aircraft, but recommends no authorization for any procurement or advance procurement funding. Committing to procurement now would violate the concept of "fly before buy," which will help reduce the funds that have frequently been wasted as DoD has urgently pursued acquisition programs on a highly concurrent basis. With the changes that have taken place in the world, there is time to proceed more cautiously on most development programs, including the V-22.

The committee directs that the studies specified in its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), and summarized above, be completed and submitted within 6 months of enactment of this bill to the Committees on Armed Services of the Senate and the House of Representatives.

The committee also directs the Secretary of the Navy to report to the Committees on Armed Services of the Senate and the House of Representatives within 6 months of the enactment of this bill on alternatives for increasing the internal payload capability of the V-22, the effects such a modification would have on the costs, schedule, or performance of the program, and any effect that this might have on the capability to carry the V-22 aircraft on aviation-capable amphibious ships.

SEA LANCE

The administration proposed to cancel the Sea Lance program. This system would have provided our submarines with the ability to attack enemy submarines at ranges beyond which they could be engaged with MK-48 torpedoes. Sea Lance would have used a conventional warhead on a MK-50 torpedo to replace the capability lost when the SUBROC nuclear depth bomb weapons were retired. Sea Lance would have also been used in surface ships to launch a weapon beyond the range of other antisubmarine rockets and to respond to threats more quickly than would be possible using helicopters.

The committee is concerned that the Navy has chosen to cancel the Sea Lance in spite of the fact that (1) a valid operational requirement for such a weapon still exists, (2) testing and development results have been good, and (3) no other alternative for meeting the operational requirements has been identified. The committee is also concerned that this cancellation would forego an important capability for our current submarine forces and surface ships. The committee notes that the absence of Sea Lance capability would call into question much analysis on the projected capability and effectiveness of the *Seawolf* (SSN-21) class submarine.

The committee recommends authorization of $71 million in fiscal year 1991 to continue development and testing of the Sea Lance weapon system, to produce a technical data package, and to pursue technology and production engineering improvements.

AIRBORNE MINE COUNTERMEASURES

The National Defense Authorization Act for Fiscal Years 1990 and 1991 authorized $8.5 million in each year for prototype development of the Navy's Magic Lantern airborne mine countermeasures system. The committee has noted the progress made in this development in the past year and supports continuing the program in fiscal year 1991, consistent with the authorization for fiscal year 1990.

The committee recommends authorization of $10 million, including $8.5 million to complete development of the two prototype systems included in the fiscal year 1990 authorization and $1.5 million to adapt the Magic Lantern system to the MH-53E mine sweeping helicopter.

ASSAULT BALLISTIC ROCKET SYSTEM

The retirement of battleships and the resulting loss of ship-to-shore fire support for amphibious operations leave the Navy with questionable support capability for Marine Corps assault echelons. In the past, the Navy has considered adapting the Army's Multiple Launch Rocket System (MLRS) family of munitions, including the Army Tactical Missile System (ATACMS) for over-the-horizon operations, for shipboard use as a means of providing the necessary firepower. The committee believes that the Navy can develop a modular weapon system which will utilize the Army's existing munitions and can be deployed on a wide variety of ships, both combatants and noncombatants.

The committee recommends authorization of $31 million for the Navy to initiate a proof-of-principle program to demonstrate the viability of such a modular approach.

INTELLIGENCE

The Administration requested an authorization of $2.5 million in fiscal year 1991 for a classified area. This request included $1 million for upgrades to an intelligence collection program. The committee does not support the proposed changes to this system. Therefore, the committee recommends authorization of $1.5 million, and recommends that authorization of the requested $1 million upgrades be denied.

CLASSIFIED INITIATIVE

The committee recommends authorization of $5 million in fiscal year 1991 for a classified initiative. Details are provided in the classified annex to this report.

FLEET ELECTRONIC SUPPORT AIRCRAFT

In the National Defense Authorization Act for Fiscal Year 1989, the Congress authorized the Navy to lease aircraft for use by the Fleet Electronic Warfare Support Group (FEWSG). At the request of the Navy, the Congress renewed that authorization in the National Defense Authorization Act for Fiscal Years 1990 and 1991. Despite repeated expressions of interest in proceeding with the FEWSG modernization program, the Navy still has not acted to initiate a lease of aircraft to replace aging ERA-3Bs used in the FEWSG mission.

Since last year, the Navy has removed all depot maintenance funding in the Five Year Defense Program to maintain the ERA-3B fleet. The committee understands that the Navy also has not programmed any funding to modernize the fleet in the pending Six Year Defense Program. The FEWSG fleet will become unsupportable within years.

The Navy should wait no longer to initiate a replacement for the FEWSG fleet. The committee recommends an authorization of $15 million to initiate a competition for an aircraft to replace the existing fleet of ERA-3B FEWSG aircraft.

DISTRIBUTED SIMULATION CAPABILITIES FOR NAVY RESERVE

This spring the Navy and the Defense Advanced Research Projects Agency demonstrated the ability to link Navy and Marine sea and air units and Army units in a combined exercise against opposition forces using distributed simulation technologies. The demonstration proved the ability to link remotely stationed, highly dissimilar forces in a combined exercise against realistic opposition forces.

The committee believes such distributed simulation capabilities are a key element in improving the utility of reserves in the Navy. One of the reasons the Navy has not been able to utilize reserve forces as extensively as have the other Military Departments is the need to have reservists located geographically near major ports. The distributed simulation technology illustrates that it is now possible to recruit reservists who live far from home ports and link them in realistic training to their ships via distributed simulation.

In order to promote the extension of distributed simulation to the Navy Reserve, the committee recommends an authorization of $10 million to extend the Battle Force Inport Training (BFIT) concept to Navy Reserve units.

INDUSTRIAL PREPAREDNESS

The committee strongly endorses the Navy's initiative to develop and implement training to professionalize the acquisition workforce. This initiative is intended to educate engineers and managers in proven design and implementation techniques to enhance quality and reliability, to ease the transition from design to production, and to reduce unit cost. Of the amounts provided for the Navy's Industrial Preparedness program, the conferees direct that $3 million be made available for continued support of this activity.

NON-NUCLEAR PROPULSION FOR SUBMARINES

The committee observes that significant progress has occurred in the development of air-independent propulsion (AIP) systems for submarines and smaller submersibles. The Navy's past success with nuclear-powered submarines has reduced the need for exploring alternative or complementary technology; however, AIP systems have evolved into important capabilities for foreign navies, and the United States should consider these systems for use in swimmer delivery vehicles, special purpose submarines, or other craft.

The committee directs the Secretary of the Navy to report to the Armed Services Committees of the Senate and the House of Representatives not later than February 15, 1991 on the status of development (and cost) of non-nuclear propulsion systems for submarines and submersible vehicles and on the potential application of such technology in United States naval vessels.

R-1 Line	PE	Program	Amended FY 1991 Request	Senate	
				Change to Request	Authorized
		AIR FORCE RESEARCH & DEVELOPMENT CHANGES			
4	62102F	MATERIALS	60,847	3,000	63,847
7	62203F	AEROSPACE PROPULSION	62,583	4,000	66,583
14	62702F	COMMAND CONTROL AND COMMUNICATIONS	79,409	1,000	80,409
17	63112F	ADVANCED MATERIALS FOR WEAPON SYSTEMS	15,042	3,000	18,042
28	63269F	NATIONAL AERO SPACE PLANE TECH PROG	158,000	(158,000)	
47	63311F	ADVANCED STRATEGIC MISSILE SYSTEMS	100,344	49,656	150,000
51	63428F	SPACE SURVEILLANCE TECHNOLOGY	34,138	(24,138)	10,000
		DSP FOLLOW-ON		152,000	152,000
54	64240F	B-2 ADVANCED TECHNOLOGY BOMBER	1,566,692	184,000	1,750,692
74	12424F	SPACETRACK	15,527	6,000	21,527
77	12433F	NUDET DETECTION SYSTEM	5,125	18,500	23,625
82	33601F	MILSTAR SATELLITE COMM SYS (AF TERM)	24,425	(24,425)	
83	33603F	MILSTAR SATELLITE COMMUNICATIONS SYSTEM	744,164	(744,164)	
		MILSTAR ALERNATIVE		20,000	20,000
89	63230F	ADVANCED TACTICAL FIGHTER	763,923	106,441	870,364
105	64239F	ADVANCED TACTICAL FIGHTER FSD	283,441	(283,441)	
145	27215F	TR-1 SQUADRON	54,764	(5,700)	49,064
148	27316F	TACIT RAINBOW	9,759	27,000	36,759
172	52610F	A-7 SQUADRONS (ANG)		15,000	15,000
		C-130J		10,000	10,000
998		TACTICAL CLASSIFIED	750,901	(60,134)	690,767
999		INTEL & COMMUNICATIONS CLASSIFIED	2,157,058	(154,794)	2,002,264
198	64707F	WEATHER SYSTEMS - ENG DEV	5,361	(586)	4,775
199	64735F	RANGE IMPROVEMENT	100,928	(19,965)	80,963
205	65708F	NAVIGATION/RADAR/SLED TRACK TEST SUPPORT	27,223	(4,191)	23,032
206	65712F	INITIAL OPERATIONAL TEST AND EVALUATION	20,884	(10,884)	10,000
207	65807F	TEST AND EVALUATION SUPPORT	318,639	(24,287)	294,352
208	65808F	DEVELOPMENT PLANNING	9,138	(1,638)	7,500
210	65863F	RDT&E AIRCRAFT SUPPORT	61,793	(5,000)	56,793
211	65894F	REAL PROPERTY MAINTENANCE - RDT&E	92,383	(10,839)	81,544
220	78011F	INDUSTRIAL PREPAREDNESS	72,133	(72,133)	
		TOTAL RDT&E AIR FORCE	13,276,300	(1,004,722)	12,271,578

NATIONAL AEROSPACE PLANE

The amended defense budget request for the National Aerospace Plane (NASP) is $158 million. The committee recommends terminating the Department of Defense's participation in the NASP program for reasons of affordability, higher priorities, and concerns about its ability to provide lower-cost access to space.

While the committee believes that NASP offers the promise of important technology, the committee believes that there are other space access problems and priorities facing DoD, other government agencies, and commercial space users that are more urgent. The

Defense Department itself has pressing near-term launch vehicle and reconnaissance deficiencies that cannot be addressed due to lack of funds. NASP resources should be applied to these deficiencies. Accordingly, the committee recommends authorizing no funds for the NASP program at the likely defense budget levels of the foreseeable future.

ADVANCED STRATEGIC MISSILE SYSTEMS

The amended defense budget request for the Advanced Strategic Missile Systems (ASMS) program was for $100.344 million. The committee notes that the funding for the ASMS program was sharply reduced in fiscal year 1990, and that the amended request does little to restore the historic funding level. As discussed at length in the section of this report on ICBM Modernization, the committee finds the status of the U.S. ICBM modernization program in flux.

The committee is strongly convinced that ASMS represents a critical and necessary hedge in our strategic planning. ASMS should provide the foundation for secure, survivable, and enduring basing which can deter an adversary's threat. Key to this is the development of low-cost missile and guidance technologies, the capability to penetrate strategic defenses, and particularly the technology needed to place at risk the entire spectrum of target types—including heavily protected bunkers and mobile power projection forces.

For this reason, the committee recommends that the ASMS program be placed on a stable footing at a higher funding level, and maintained at that level in future years, to provide a basis of support for various possible outcomes of our ICBM modernization effort. The committee notes that one of the major elements of cost for the Small ICBM (SICBM) program is the AIRS-derivative guidance system, which is very costly to procure, must be operated continuously in peacetime in order to provide adequate accuracy, and is expensive to maintain. The committee believes that the AIRS system is not likely to be a good match for many of the possible mobile basing modes for an SICBM, and that the time has come to accelerate research on an alternative low-cost guidance unit which would be capable of dormant operation with high accuracy, such as one based on the Global Positioning System or other external aids.

Also in the near term, it is possible that the administration will elect to base both MX and SICBM missiles in hardened silos. The committee is aware that technologies exist to increase silo hardness by an order of magnitude or more; indeed this is the strategy the Soviets have pursued over the years with successive generations of ever-harder silos. Particularly for a SICBM, enforcing a targeting requirement of several Soviet re-entry vehicles (RVs) in order to destroy one SICBM RV seems to be a particularly attractive option.

Accordingly, the committee adds to the requested amount for ASMS $25 million for the development of a low-cost, externally aided guidance set for the Small ICBM, and $24.656 million for development of super-hardened silos for a SICBM. The committee further directs the Air Force to prepare a plan for a demonstration during fiscal year 1995 of at least one prototype low-cost dormant externally-aided guidance unit for a Small ICBM, and a plan to demonstrate during the same year the hardness of a prototype silo design, built to at least one-third scale, that would provide the maximum increase over current silo hardness for an installed cost not to exceed $40 million per silo for 500 silos. Both plans should be incorporated into the materials accompanying the submission of the defense budget request for fiscal years 1992 and 1993.

Finally, the committee emphatically supports the restoration of research efforts in earth penetrating and relocatable target weapons which were deleted in fiscal year 1990. These programs are the only hedge against the potential of widespread Soviet dispersal and hardening of their leadership and power projection forces. Deterrence may require the United States to hold these targets at risk.

Accordingly, the committee authorizes the Air Force to re-establish within the ASMS program research on both earth-penetrating weapons design and weapons for attacking relocatable or movable targets. The Air Force is further authorized to add funding for these restarts through customary transfer and reprogramming processes.

SPACE-BASED WIDE AREA SURVEILLANCE

The amended defense budget request includes $34.138 million for RDT&E for Air Force development of a space-based radar for global wide-area surveillance. The committee recommends a $24.138 million reduction to the requested amount.

As currently configured, the proposed system would be an expensive new start—perhaps as high as $10 billion, and much more than that in terms of true 20-year life-cycle costs. The committee believes this program is unaffordable and inconsistent with other priorities in the Defense Department's space and C^3 programs.

The committee also believes that the specific technology selected by the Air force has insufficient growth potential to satisfy stated requirements for the far term. Evolving the system would require, in effect, a wholesale satellite redesign effort. The committee will not support any initiative without a clear and convincing low observable detection and tracking capability.

The committee doubts the utility of the proposed system for dense or small theaters, such as Europe, Korea, or contingency operations. The proposed system will not be very useful where air traffic is dense or where flight times are short. The applications of greater utility appear to be open-ocean battle group defense and continental air defense against long-range Soviet bombers.

The continental air defense mission for the proposed space-based radar makes sense only in the context of a bolt-from-the-blue, leading-edge air attack utilizing stealthy aircraft or very long-range stand-off missiles that the current North Warning and backscatter radars could not detect, and which was not detected by national intelligence systems, or a cruise missile attack by quiet, close-in submarines. And yet the proposed space-based radar could not detect those threats either. The need for greatly improved open ocean carrier defense capabilities against Soviet bombers is in question in light of changes in the European security environment.

For these reasons, the committee believes that an acquisition program for the proposed space-based radar is at best premature. As noted below, the committee supports technology development in this area, but finds that the Air Force proposal, based on available technology, poses little technical challenge. Accordingly, the committee directs the Air Force to use the authorized $10 million for development of advanced space-based radar technology.

Finally, the Navy has proposed a space-based wide area surveillance technology demonstration program based on infrared detection. Based on consultations with DoD officials and testimony, the committee is persuaded that useful information on the potential of infrared systems to detect and track advanced airbreathing threats may be gained from the Navy program. The committee directs that this objective be assigned as a major goal of the demonstration effort. The Navy's proposal also requires a demonstration of challenging on-board processing requirements.

NUCLEAR DETECTION SYSTEM

The Ground/Airborne Integrated Terminal (G/AIT) program within the Air Force Nuclear Detection System has been troubled by technical problems and cost overruns. The prime contractor has overrun the fixed price development contract by $40 million (on an $85 million contract). Potential users have fallen from 88 to 14, and per unit costs have soared from $8–10 million to $17 million. In addition, the full-scale development effort has failed to meet all the technical performance requirements; in particular, the microprocessor does not meet processing speed standards.

The G/AIT program has now been restructured. The Air Force proposes to separate the ground terminal procurement from that of the more costly airborne terminal. The three ground terminal prototypes would be developed based on the existing Integrated Correlation And Display System (ICADS) terminals now in use at the U.S. Space Command, with up to 10 terminals to be produced based on prototype design. The Air Force would conclude the current contract with Texas Instruments and take delivery of the five full-scale development terminals already produced. Subsequently, the Air Force would compete a new contract to upgrade the microprocessor, add software, and work out the display interfaces. The result of the program restructure will be a net increase of $40 million through 1995.

The Air Force has requested the following adjustments to implement this restructured program: shift $17.6 million to RDT&E from the Other Procurement, Air Force account; reduce the request of $22.8 million in the Air Force Aircraft Procurement account by $21.9 million; and shift the remaining $.9 million in that account to Air Force RDT&E.

The committee recommends authorizing these amounts for this purpose.

MILSTAR

The amended budget request included over $1,082.2 million for R&D, procurement, and O&M for the Military Strategic and Tactical Relay (Milstar) communications satellite and related terminals.

The committee recommends termination of this program (sec. 131) and therefore has denied the funds requested for Milstar in fiscal year 1991.

The committee's decision to terminate the Milstar program reflects its determination that in the context of the severe budget squeeze and the declining threat of nuclear war, the Department of Defense has not justified the extraordinary expense of this over-designed system for a protracted strategic nuclear warfighting mission. In addition, the committee was concerned by continuing delays and cost increases in the program and its questionable utility for tactical applications. The decision to terminate Milstar also reflects the committee's view that U.S. command, control, and communications (C^3) capabilities are sufficiently robust and redundant now and for the forseeable future to permit Milstar's cancellation and the examination of lower-cost alternatives. Finally, the committee believes that there are higher defense priorities than Milstar in a constrained budget environment.

The Department of Defense has been unable to satisfactorily answer certain fundamental questions relating to the requirements, affordability, and operational utility of the Milstar system and its priority relative to other defense needs in a declining budget and threat environment:

(1) What is the requirement for an extraordinarily expensive communications system for protracted strategic nuclear warfighting?

(2) What specific threats to U.S. strategic C^3 capabilities exist now or will exist that call into question U.S. deterrence capabilities?

(3) Is $40 billion in investment in new and improved command, control, and communications systems since 1980 insufficient to provide an assured means of retaliation?

(4) What are the added features of Milstar that would justify the expenditure of an additional $35–40 billion for this system alone?

(5) Are Milstar's capabilities—if realized—for controlling nuclear and conventional forces in an extended nuclear war necessary for deterrence and at what cost?

(6) Is Milstar an appropriate and cost-effective communications system for our tactical conventional forces? Does Milstar provide useful communication capabilities to actual fighting forces such as tactical fighter squadrons and ground maneuver units such as companies, battalions, and brigades? What are the alternatives?

AFFORDABILITY

The committee cannot, at this time, include in this report certain Milstar costs because the Department of Defense will not declassify all costs associated with the program. Such information, however, is available for review by any Senator on a classified basis.

There is a substantial amount of information about the Milstar program which is unclassified, including information reported in the press. In 1988, Air Force Secretary Pete Aldridge stated that each Milstar satellite with its launch vehicle cost $1 billion. According to other press accounts, the costs of acquiring the initial 10 Milstar satellites and associate terminals would be in excess of $20 billion, not including the cost of launch vehicles. The cost of launch vehicles is in the range of $250 million each. The annual operating expenses for the constellation can be estimated to be about $150 million. Since at least one satellite will have to be produced and launched every year to maintain the constellation, annual expenses would approach or exceed $1 billion after the initial constellation of 10 satellites would be deployed. Based on the foregoing information, the 20-year life cycle costs for Milstar would be in the range of $35–40 billion. The committee notes that projected costs of Milstar were so daunting that the Air Force—in evaluating Milstar against other priorities—attempted earlier this year to persuade Secretary Cheney to terminate the program, a recommendation that the Secretary did not accept.

DELAYS AND COST INCREASES

Milstar is now nearly 5 years behind schedule and several billions over cost. The program has experienced significant technical problems. Its schedule remains highly concurrent: 5 of the initial 10 satellites would be procured with research and development funds, and a production decision would be made on satellites six and beyond before any system-level operational testing would occur. The committee notes that initial operational capability remains years away and full operational capability even further.

PROTRACTED STRATEGIC NUCLEAR WARFIGHTING MISSION

Milstar was conceived in a period of intense U.S.-U.S.S.R. strategic competition, when the threat of global war arising from a confrontation in the heart of Europe dominated U.S. military planning, when resources for meeting these threats were increasing substantially, and when the Reagan Administration was toying with the concept of fighting and winning nuclear wars. Milstar was designed to survive and operate for a very long period after the start of a nuclear war in the face of concerted Soviet efforts to destroy it.

In theory, Milstar could allow U.S. commanders in chief (CINCs), such as the Commander in Chief of the Strategic Air Command and the Commander in Chief of the U.S. Space Command, to conduct conferences and to make on-the-spot decisions about prosecuting a nuclear war for days, weeks, or even months after the first nuclear exchanges. In addition, Milstar would provide a capability to coordinate and retarget U.S. bombers executing strikes against fixed and relocatable Soviet targets hours after the Soviet Union would have been struck by U.S. ICBMs and SLBMs in retaliation against a nuclear first strike by the Soviet Union.

The committee recognizes that survivable command, control, and communications (C^3) is a necessary prerequisite for deterrence. The question facing DoD is whether a highly expensive C^3 system, such as Milstar, the primary function of which is to operate for an extended period after massive nuclear exchanges, adds appreciably to our deterrent capabilities. The committee agrees with the position ultimately adopted by President Reagan that "a nuclear war could never be won and must never be fought." The question then remains: what is the justification for spending $35–40 billion for extended nuclear warfighting?

In addition, the committee believes that the recent dramatic decreases in the Warsaw Pact conventional threat hold important implications for the Soviet strategic threat. As the likelihood of a conventional war in Europe has significantly declined, the likelihood of a nuclear war originating from escalation of a European conflict has also diminished. As stated in the Joint Chiefs of Staff 1990 Joint Military Assessment, "the risk of nuclear deterrence failing is assessed to be low and at this moment to be decreasing." In this changed threat environment, the committee believes it would be neither wise nor fiscally prudent to spend $35–40 billion to acquire the strategic nuclear warfighting coordination capabilities to be provided by Milstar.

REDUNDANCY

Substantial command, control, and communications (C^3) improvements have been a major, integral aspect of the overall strategic modernization program initiated in the late 1970s and early 1980s. Since 1980, the committee has supported the investment of over $40 billion for strategic C^3 improvements and operations. The gains achieved or underway are impressive, including the acquisition of and improvements to the E–4 and EC–135 airborne command posts, which would be used by the National Command Authorities and military commanders to direct retaliatory strikes; upgrades to the Air Force Satellite Communications (AFSATCOM) system used to communicate to a variety of strategic forces; the development of hardened and mobile command posts; acquisition of the groundwave emergency network (GWEN), which is impervious to disruptions caused by nuclear effects; deployment of the extremely low-frequency system, which alerts strategic submarines to an emergency situation; acquisition of the new airborne very low frequency (VLF) communications system for the strategic submarine force (called TACAMO); fielding of the very successful VLF miniature receive terminal (MRT) technology for enhanced communications to bombers and ICBMs; acquisition of the more survivable and capable third generation of the Defense Satellite Communications System (DSCS); and near-term deployment of the ultra high frequency (UHF) follow-on satellite system with its add-on extremely high frequency (EHF) communications "package."

In general, Milstar would not replace these systems and capabilities, but would add several features for strategic forces and missions, including additional redundancy; two-way communications capabilities to strategic bombers over the North Pole and to naval forces operating in Soviet home waters under the maritime strategy. However, the Defense Department testified before the committee that dissemination of the Emergency Action Message (EAM), the order to implement war plans, can be reliably executed today without Milstar.

The Department of Defense also testified that the VLF system connecting airborne command posts to enroute bombers constitutes an assured, survivable link and acknowledged that assured, survivable EAM dissemination to SSBNs would continue to rely on the VLF system on TACAMO aircraft. UHF and VLF communications systems on the airborne command posts and relay aircraft provide assured, survivable communications to ICBMs. The GWEN system provides additional assured connectivity. Moreover, bomber forces would not have been equipped with Milstar terminals under current plans until after the turn of the century. Until that time, bombers would have had to rely on existing UHF and VLF systems anyway.

TACTICAL APPLICATIONS

A decade ago, a decision was made to terminate a major strategic communications satellite program called STRATSAT (Strategic Satellite) largely because it cost too much and served too narrow a mission—execution of DoD's nuclear war plan (the Single Integrated Operational Plan or SIOP). Milstar was proposed instead as a multi-mission satellite to service both strategic and tactical users. The problem is that, over time, the tactical conventional user base for the system has atrophied, leaving Milstar as a satellite for conferencing by commanders in chief of nuclear forces and for transmitting orders to execute the nuclear war plan—the Single Integrated Operational Plan or SIOP. For assured SIOP execution alone, the proposed Milstar constellation is more complex and expensive, and has far more capacity, than necessary. DoD acknowledged in testimony that SIOP execution requires only half of the planned constellation. The question is whether this excess capacity can realistically be used by tactical forces as a practical matter. Why is a nuclear hardened satellite that costs $1 billion to build and launch an appropriate system to proliferate around the globe for use by tactical forces?

Tactical forces and supporting functions such as intelligence reporting and dissemination do not require communications equipment that is extremely survivable against nuclear weapons effects, such as blast and radiation. Why would not tactical conventional forces be as well-served by extremely high frequency (EHF) satellites or EHF "packages" on other host satellites that are not nuclear hardened, that are less complex and heavy, and that are far less expensive than Milstar? The Navy is utilizing such EHF packages, hosted on existing and planned ultra high frequency (UHF) satellites, to provide jam-resistant, low-probability-of-intercept communications within deployed battle groups. Similar systems could be deployed for the Army, the Air Force, the Marine Corps, and special operation forces.

The terminal situation is similar. Milstar terminals are nuclear hardened, require significant amounts of power, and are large and complex. As a result, the Services appear to have decided that they are too expensive to procure in the quantities needed for tactical forces, are too large and heavy for most mobile units, and are not competitive with other Service tactical communications systems. Technology for smaller and less expensive EHF terminals is being investigated, but DoD testified that it is not mature enough for engineering development, and none of the Services has plans for developing and procuring such terminals.

The conclusion reached a decade ago on the STRATSAT program is even more relevant to a judgment on Milstar today, when the defense budget is severely constrained and nuclear confrontation is less likely.

POSSIBLE ALTERNATIVES

If SIOP execution in the future requires an advanced, space-based, relay capability, are eight satellites with Milstar's capacity, complexity, and cost the answer? The committee considered reducing the size of the planned Milstar constellation as a cost-saving measure and to bring satellite capacity more in line with the needs of the actual user base, but DoD asserts that a smaller constellation would not provide acceptable geographic coverage. The Defense Department argues that no new satellite program satisfying Milstar's requirements can be developed, procured, and deployed for less than the remaining initial acquisition costs of 10 Milstar satellites.

Granting this assertion (which ignores the high costs of replenishing the constellation), the committee believes that the requirements that drove Milstar's design and cost must be reviewed and reduced to produce an affordable acquisition program. For strategic forces, DoD must define specific threats to our ability to retaliate effectively and assess alternatives to prevent degradation. The committee is not persuaded that there is a significant deterrent value in ensuring robust communications worldwide to and among military commanders in the aftermath of a strategic nuclear war. The Department of Defense must explain how these commanders would survive, how the forces they command would survive, and what missions and utility these forces would have. DoD must examine whether effective tactical communications can be acquired that feature less survivability and less costly and cumbersome terminals than the Milstar program would provide. Tactical forces' needs for higher data rates than a voice-grade system such as Milstar would provide also must be examined.

The committee recommends authorizing $20 million for examination of an alternative program or programs to Milstar. The committee directs DoD to utilize available prior-year Milstar funds to continue the AFSATCOM program. The committee believes the Department of Defense must undertake a thorough requirements review in conjunction with a realistic assessment of available resources to establish an affordable and cost-effective replacement program or programs consistent with current threat projections and priorities.

ADVANCED TACTICAL FIGHTER

The amended budget request includes $763.9 million to conclude the demonstration and validation phase for the Air Force's Advanced Tactical Fighter, and $283.4 million to initiate full-scale development of the winning design that emerges from the ongoing competition during the demonstration and validation phase.

Secretary Cheney reviewed the Advanced Tactical Fighter and the Navy's version of the Advanced Tactical Fighter (NATF) programs in the course of the Major Aircraft Review. He recommended that the full-scale development program be continued as planned, but that procurement be delayed to eliminate excessive concurrency.

The committee has examined the analysis used by the Secretary to evaluate the Advanced Tactical Fighter. While it represents a detailed and comprehensive evaluation, the scope of the review was limited to the point where critical issues remain unanswered. For example, the ATF and NATF programs were reviewed in isolation from the broad question of modernizing tactical aircraft. No work was undertaken to evaluate modernization plans for close air support aircraft or multirole aircraft. Further, the committee understands that all data on upgrades for existing F-15 aircraft evaluated during the Major Aircraft Review was provided by the Air Force, despite the fact that the Air Force has long concluded that it could not accept an F-15 and had to develop an ATF. While improvements to the F-16 were examined, they were studied only in comparison to the ATF requirements criteria, and not in the context of overall modernization of tactical forces. Similarly, the Major Aircraft Review considered several Navy variants, including the F-18 Hornet 2000 and the so-called Tomcat 21 (an upgraded F-14), as alternatives to the NATF. Again, this review was done in isolation from the broader question of modernizing Naval tactical aviation.

In short, the committee believes that there are too many unresolved issues to permit an unqualified endorsement for full-scale development for ATF and the NATF at this time. Further, the committee believes that the Defense Department must conduct a more comprehensive evaluation of Air Force and Navy tactical air modernization, to include close air support and multirole aircraft, and not limit the analysis to ATF performance requirements only.

Consequently, the committee recommends authorization of $870.4 million to complete the demonstration and validation phase and select a winning design for the ATF program. This authorization represents an increase of $106.4 million, which shall be used to extend the flying prototype phase for the winning ATF prototype aircraft through fiscal year 1991. The committee also recommends a provision (sec. 213) that would restrict the Air Force from proceeding with full-scale development.

The committee also recommends an authorization of $100 million for advance procurement for the F-15. The committee takes this action exclusively to protect an option for an F-15XX alternative to the ATF. Preliminary analysis illustrates that with the development funds earmarked for the ATF, it would be possible to develop the F-15XX for air superiority, develop a modernization program for close air support aircraft, and launch a major update program for the F-16 to modernize the multirole aircraft fleet well into the next century. While the F-15XX does not match the performance promised by the ATF candidate designs, the opportunity to modernize the entire tactical fighter fleet for the same price as the ATF must be thoroughly examined. The committee reserves its judgment whether the ATF and the NATF are needed, or whether less capable alternatives might be satisfactory to meet a reduced threat.

Advance procurement funds are necessary to preserve an F-15XX option beyond fiscal year 1991. However, since the committee does not endorse extending production of the F-15E, the committee does not propose to amend section 134 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 that terminated the F-15E program. The committee understands that if the F-15XX alternative is not pursued, $80 million of the $100 million could provide spare parts that can be used to support the F-15E fleet.

ADVANCED TACTICAL AIRCRAFT

The amended budget request includes $30 million for the Air Force to adapt the Navy's A-12 attack aircraft to Air Force-unique requirements and logistics systems. Recent developments in the Navy's A-12 program have indicated the need to realign the Air Force program. Since the Advanced Tactical Aircraft (ATA) program for the Air Force is paced by A-12 development, the committee believes that the funds requested for fiscal year 1991 by the Air Force will not be required until a later date. The committee emphasizes that it continues to support ATA development and that removal of ATA funding for fiscal year 1991 is directed without prejudice to the program.

YA-7F EVALUATION

The committee is aware of the positive progress obtained during the flight testing of the two YA-7F prototype aircraft. Although the committee supports the Air Force's interim effort to upgrade early model F-16s to enhance their close air support capability, the committee is not persuaded that the A-16 should be considered as the only long-term solution. The committee believes that the potential cost savings offered by the YA-7F warrant additional evaluation for Air National Guard (ANG) application.

To support this evaluation, the committee recommends an authorization of $15 million. Further, the committee directs that the National Guard Bureau and the Air Force Reserve (AFRES) assign appropriate test pilots and personnel from the ANG/AFRES Test Center to the evaluation. The Chief of the National Guard Bureau is directed to brief the congressional defense committees on the results of the evaluation not later than May 1, 1991.

C-130J

Two years ago, the Commander in Chief of the Military Airlift Command initiated a study to examine ways to improve the capability of the tactical airlift fleet. At that time, the Air Force had long-range plans to build a new-design tactical transport after the turn of the century. Recognizing the aging of the existing fleet, the studies examined improvements to the existing C-130 aircraft, utilizing modern cockpit design to reduce manning requirements and eliminate maintenance-intensive components. The design that emerged is called the C-130J.

This year, the new Commander in Chief indicated that the Air Force had cancelled its long-term modernization plans for tactical airlift, and continues to view the C-130J program as an important modernization effort, though one that was not included in the amended budget request because of funding constraints.

The committee notes that the current fleet of C-130s in the Air Force exceeds 25 years in age. A new-design replacement for the C-130 is unaffordable in the current budget situation and would not enter service for 15 years. The committee believes that upgrading the C-130 represents a cost effective way to maintain the current tactical airlift capability, which was indespensible in the recent operation in Panama. Consequently, the committee recommends an authorization of $10 million to initiate design of the C-130J.

SPACE POWER SOURCES

NASA, the Air Force, and SDIO may require satellite power levels with survivability features that solar panels and batteries cannot provide. Nuclear power sources may satisfy these requirements. In the current budget environment, however, it seems clear that the Nation cannot afford more than one reactor program for space applications.

The ongoing SP-100 program managed by the Department of Energy may satisfy NASA needs, but it does not appear to address Air Force and SDIO goals. The SP-100 program will not provide survivability levels, compactness, or power levels that DoD may require in the future.

The committee understands that the Air Force has convened a Science Advisory Board (SAB) to examine these and related issues. The SAB is chartered to "review DoE, SDIO, and NASA space nuclear power technology efforts, and recommend a space nuclear power technology development program which the Air Force can in turn recommend to DoE to guide national investment in this technology area."

The committee applauds this Air Force initiative, but is concerned that the issue will not receive the national, interdepartmental attention required. The committee, therefore, recommends that the study results be forwarded to the Congress and the National Space Council.

ADVANCED LAUNCH SYSTEM

In preparing the amended defense budget request for fiscal year 1991, the Air Force decided not to place the Advanced Launch System (ALS) on a development and acquisition track. Instead, the Air Force opted to restrict ALS to a technology program focused on developing a prototype engine and product improvements to existing space boosters. Though mindful of the severity of budget problems, the committee has several unanswered concerns relating to the Air Force's decision and its implications for U.S. space access capabilities.

First, the committee believes that the deficiencies in our existing space access programs are serious enough to warrant significant near-term initiatives. The lack of flexibility and responsiveness to operational needs are manifest and unlikely to improve substantially without a major departure from current systems and procedures. The operational deficiencies of current space access systems are matched by exceedingly high costs, which appear to be growing larger rather than smaller.

Second, the ALS development program considered and rejected by the Air Force leadership was entirely unrealistic. It was based on a vehicle design three times the size of the current Titan IV booster, and included facilities for a launch rate three times that of the maximum planned for the Titan IV. It is obvious, therefore, that the Air Force leadership would judge this program unaffordable.

Furthermore, the Air Force leadership decided that no requirement existed for a very large vehicle and facilities for a high launch rate. It appears that the ALS program office assumed that some national requirement for a very heavy lift booster exists or will exist—for example, in connection with the Moon-Mars initiative—and that satisfying this requirement should be an Air Force responsibility. If the Air Force leadership disagrees with that assessment, it should consider a booster program that satisfies DoD requirements. It is the responsibility of the administration as a whole to pass judgment on future *national* requirements, funding, and management responsibilities. The Air Force should not delay seeking solutions to pressing launch problems due to uncertainty over these issues.

Third, the Air Force leadership's decision not to pursue an ALS development program due to the lack of a heavy lift requirement ignores the serious *operational* deficiencies of current launch vehicles. The committee doubts that a payload weight criterion has ever inhibited development of new generations of combat aircraft, ships, or fighting vehicles.

By repeated testimony DoD concurs that the key to improving our access to space in a major way is a new launch vehicle expressly designed for low cost and operational efficiency and responsiveness. Such a vehicle cannot be acquired, however, unless development costs are substantially reduced from the current ALS baseline.

Consequently, the committee directs the Assistant Secretary of the Air Force for Space and the Assistant Secretary of the Air Force for Acquisition to institute a review of the baseline ALS program unsuccessfully proposed for engineering development. The purpose of the review is to identify excessive or unrealistic requirements and other cost saving measures. The goal is to determine whether an ALS acquisition program is truly unaffordable. The committee expects the Air Force to be prepared to review this matter in depth in hearings next year.

In addition, the committee encourages the Air Force to explore innovative and possibly less expensive alternatives to the ALS baseline program within the ALS program. Some of these alternatives are being funded within SDIO; others currently are not funded at all. In another section of this report, the committee outlines its plans for a constructive competition between the ALS program and a Navy booster concept.

The amended defense budget request included $60.314 million for the ALS program. The committee recommends authorizing this request.

AIR FORCE SATELLITE CONTROL NETWORK

The Air Force Satellite Control Network (AFSCN) upgrade program is years behind schedule and far above projected costs. Until problems are solved in the Command and Control Segment (CCS), the U.S. Space Command will not be able to exercise full operational control of assigned systems. Also, the Air Force will continue to pay monetary and personnel penalties for operating old equipment alongside the replacement equipment until the new systems become fully capable.

The Air Force states that it intends to compete the next sustaining engineering contract for the CCS, under which remaining development tasks will be funded. The committee questions whether the Air Force is making all necessary preparations for a fair competition, especially in terms of documentation. The committee directs the Air Force Competition Advocate to review and monitor the Air Force Systems Command's plans and preparations for this competition.

The committee believes that the satellite control mission and capability upgrades can be accomplished more effectively and at less cost than the Air Force projects. The committee believes that the Navy has demonstrated this assertion at its Blossom Point satellite control facility. The Air Force, the U.S. Space Command, and the Navy should work together to transfer expertise and lessons learned.

For the long term, satellite designs should emphasize autonomy and simplicity of control to improve survivability and reduce the demands on ground control networks. Where possible, dependence on overseas tracking sites should be reduced or eliminated. The committee received testimony from senior officials in the Department of Defense who expressed the view that ground support and mission control elements currently constitute the weakest link in satellite survivability. In the future, some space capabilities may be distributed over larger constellations of smaller, less complex, and less expensive spacecraft. Together with a likely increase in the use of space over time, the workload imposed on the satellite control network may be unmanageable or unaffordable without major architectural and technological advances.

VANDENBERG LAUNCH FACILITY

In the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Congress mandated that the Air Force convert the existing Space Launch Complex Six (SLC-6) for Titan IV use rather than build an entirely new facility for the planned second Titan IV launch capability. The Air Force was granted leeway to study the issue further, but has yet to inform the Congress of its findings and recommendations. The committee stands by the conclusions reached last year, which are reinforced by the absence of additional or new information.

Therefore, the committee recommends a provision (sec. 217 that would mandate conversion of the SLC-6 facility.

R-1 Line	PE	Program	Amended FY 1991 Request	Senate	
				Change to Request	Authorized
		DEFENSE AGENCIES R&D CHANGES			
3a	61XXXD	DOD GRADUATE FELLOSHIP PROGRAM		20,000	20,000
3b	61XXXD	US-JAPAN MANAGEMENT TRAINING		10,000	10,000
8	62301E	STRATEGIC TECHNOLOGY —	207,749	(83,000)	124,749
9	62702E	TACTICAL TECHNOLGY	121,535	5,000	126,535
9a		HIGH PERFORMANCE COMPUTING		138,000	138,000
12	62712E	MATERIALS AND ELECTRONICS TECHNOLOGY	43,096	26,000	69,096
14	62715H	DEFENSE NUCLEAR AGENCY	355,066	30,000	385,066
15a	63XXXE	PRE-COMPETITIVE TECHNOLOGY DEVELOPMENT		100,000	100,000
16		SDI-GENERAL	4,460,000	(887,000)	3,573,000
43	64220C	PHASE I STRATEGIC DEFENSE SYSTEM	265,000	[-265,000]	
21	63225D	JOINT DOD-DOE MUNITIONS TECH DEVELOP	8,522	21,478	30,000
22	63226E	EXPER EVAL OF MAJOR INNOVATIVE TECHNOL	179,397	11,000	190,397
24	63569E	ADVANCED SUBMARINE TECHNOLOGY		95,000	95,000
28	63736D	COMPUTER AIDED LOGISTICS SUPPORT	13,779	2,000	15,779
29a	63XXXD	MANUFACTURING TECHNOLOGY		175,000	175,000
42	63741D	AIR DEFENSF INITIATIVE	246,920	(91,900)	155,020
51	63714D	NON-ACOUSTIC ASW		30,000	30,000
52	64702D	JOINT STANDOFF WEAPONS PROGRAM	55,448	(30,400)	25,048
		LOGISTICS/WEIGHT REDUCTION STUDY		5,000	5,000
		GENERAL SUPPORT FOR SO/LIC		2,000	2,000
		TECHNICAL SUPPORT WORKING GROUP		3,000	3,000
58	1110011BB	FORCE ENHANCEMENTS-ACTIVE	182,368	20,300	202,668
67	351541	AIRBORNE RECONNAISSANCE SUPPORT PROGRAM	179,900	(116,300)	63,600
999		INTELL & COMMUNICATIONS CLASSIFIED	1,241,499	(33,487)	1,208,012
78	64722D	JOINT SERVICE EDUCATION AND TRAINING SYS	9,689	(4,689)	5,000
82	65107D	GENERAL SUPPORT FOR POLICY	5,713	(2,065)	3,648
85a	65XXXD	CRITICAL TECHNOLOGY INSTITUTE		5,000	5,000
90	65119D	GENERAL SUPPORT FOR P&L	3,281	(583)	2,698
92	65711D	CRITICAL TECHNOLOGY ANALYSIS	4,611	(1,111)	3,500
94	65801S	DEFENSE TECHNICAL INFORMATION CENTER	26,241	(1,741)	24,500
99	65898E	MANAGEMENT HEADQUARTERS (R & D)	17,778	(1,272)	16,506
100	78011S	INDUSTRIAL PREPAREDNESS	10,912	(10,912)	
		JOINT WARGAMING SIMULATION MGT OFFICE		25,000	25,000
		AIM-9 CONSOLIDATED PROGRAM		35,000	35,000
		STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM		200,000	200,000
101	1001015D	TECHNOLOGY SECURITY FUNCTIONS	2,441	(916)	1,525
		TOTAL RDT&E DEFENSE AGENCIES	9,249,300	(306,598)	8,942,702
		TEST AND EVALUATION R&D CHANGES			
1	64940D	TEST INSTRUMENTATION DEVELOPMENT	185,899	(30,899)	155,000
7	65804D	DEVELOPMENT TEST AND EVALUATION	119,610	(39,610)	80,000
		TOTAL DIRECTOR OF TEST & EVALUATION	348,100	(70,509)	277,591
		OPERATIONAL TEST & EVALUATION CHANGES			
1	64340D	OT&E CAPABILITY IMPROVEMENT	73,800	(73,800)	
		TOTAL OPERATIONAL TEST	90,800	(73,800)	17,000

UNIVERSITY RESEARCH INITIATIVE

The committee believes that the research carried out in U.S. colleges and universities is a key to maintaining the Nation's technological superiority in the face of mounting international competition. The University Research Initiative (URI), initiated by the Congress in 1986, has increased the capacity of these universities and colleges to undertake comprehensive, multidisciplinary research and development programs relevant to the Defense Department. The URI program is a key element of the Defense Department's support of science and engineering education at the graduate level, providing funding to approximately 1,000 graduate student research assistants.

The committee continues to believe that a primary objective of the University Research Initiative is to enhance the quality of science and engineering graduate education on a nationwide basis. The statement of managers accompanying the National Defense Authorization Act for 1989 (H. Rept. 100-989) directed the Department to broaden the involvement of the overall nationwide science and engineering education infrastructure in the URI program. The Department is to be commended on the expeditious manner in which it has restructured the program so that it now directs 15 percent of the total URI funding to institutions that have received less than $3 million in DoD research and development funding. The committee urges the Department to continue to look for other means whereby this geographical broadening of defense research and development funding can be effectively applied.

DEPARTMENT OF DEFENSE GRADUATE FELLOWSHIP PROGRAM

The committee continues to support the National Defense Science and Engineering Graduate Fellowship program initiated by the Congress in fiscal year 1989. Chapter 111 of title 10, United States Code, permanently establishes this program to support well qualified students, selected solely on the basis of merit, in obtaining advanced degrees in science, mathematics, and engineering. Testimony provided this year to the Defense Industry and Technology Subcommittee indicates that the program has been well received, has had high quality applicants, and is currently supporting approximately 360 graduate students. In recognition of the success achieved by the Department in implementing the program, and the continuing need to support science and engineering education at the graduate level, the committee provides $20 million for this program in fiscal year 1991.

U.S.-JAPAN INDUSTRY AND TECHNOLOGY MANAGEMENT TRAINING

The committee believes that the strength of the U.S. defense industrial base directly depends on the strength of the Nation's overall industrial base. One U.S. ally, Japan, has demonstrated outstanding abilities in building and sustaining a strong industrial base achieved in large part by creatively using science and technology to support its industrial base activities. The committee believes that the United States can significantly benefit by understanding, in detail, the management and business practices used by Japan in these areas of science, engineering, and manufacturing.

The committee directs the Secretary of Defense to establish a program which will support, through competitively awarded grants, at least 10 U.S. universities, colleges, or non-profit institutions to study Japanese industry and technology management methods. A major purpose of these programs shall be to prepare scientists, engineers, and managers to learn from their Japanese counterparts by being able to work closely with them throughout their careers in government or industry. The committee believes that to accomplish this required close working relationship, the programs should provide training in the Japanese language and an understanding of Japanese business and social culture. Although this program is not intended to provide direct grants or aid to individuals, the program should provide its participants with an opportunity to be directly involved in Japanese scientific research, engineering development, and management programs and should be structured to help keep American government and industry abreast of Japanese scientific and technical developments and their importance.

In selecting the programs to support under this initiative, the committee directs the Secretary to give special consideration to the inclusion of universities, colleges, and non-profit institutions that can support participation of scientists, engineers, and managers from DoD and DoE laboratories. Special consideration should also be given to selecting organizations that agree to share program costs on an equitable basis, and which have demonstrated an ability to promote interchange of Japanese and U.S. scientists, engineers, and managers, including placing U.S. participants in Japanese research facilities and laboratories.

The committee provides $10 million in fiscal year 1991 for this program. The committee requests the Secretary of Defense to provide a letter report, no later than December 31, 1990, on the plans and status for implementing the program.

DARPA INITIATIVE ON CONCURRENT ENGINEERING

The committee believes that the Defense Advanced Research Projects Agency's (DARPA) program to enhance the use of concurrent engineering practices continues to provide significant contributions towards ensuring that design-for-manufacture becomes an adjunct to design-for-performance. The Concurrent Engineering Institute, competitively established by DARPA, represents an important United States asset for developing sound concurrent engineering design practices and for making these procedures available to the defense industrial base. To support this vital activity, the committee provides DARPA an additional $25 million to continue this program's concurrent engineering initiative in fiscal year 1991.

ACOUSTIC CHARGE TRANSPORT TECHNOLOGY

The Air Force and Defense Advanced Research Projects Agency (DARPA) have cooperated in the development of acoustic charge transport (ACT) technology which can be applied to advanced microelectronic signal processing. As a result of their activity, the ACT technology has the potential to substantially improve radar, electronic warfare, communications, and surveillance subsystems.

The low-cost, high-performance attributes of this technology make it an excellent candidate for incorporation in product improvements of existing subsystems to be used in land vehicles, ships, submarines, and aircraft. ACT technology also has excellent potential for use in commercial products that perform complex signal processing, such as high-speed computer disk drives, mobile and cellular communications, and automotive electronics.

The committee believes that continued Air Force and DARPA support of ACT technology is essential to insure its near-term availability. The committee directs that of the funds provided for the DARPA Tactical Technology program, $5 million shall be made available and an additional $5 million shall be provided to continue development of acoustic charge transport devices.

HIGH PERFORMANCE COMPUTING

The Office of Science and Technology Policy (OSTP) has issued its plan to advance U.S. high performance computing. This plan establishes goals and defines a broad implementing approach to maintain and extend the U.S. advantage in this area. The committee supports the goals and objectives of this plan.

The Department of Defense, working through the Defense Advanced Research Projects Agency (DARPA) and the in-house laboratories, and the Department of Energy's national defense laboratories have all made significant contributions to high performance computing technology over the past two decades. These organizations continue to provide global leadership in this important critical technology. The committee understands the importance of this contribution and believes that continuing strong participation by both DoD and DoE is both justified and necessary. It particularly recognizes the unique contributions that DARPA has made in the development of this technology, especially in the development of massively parallel processors, gigabit networking, and the associated computer programming technologies.

Section 841 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 directed the Department of Defense to designate lead activities for each defense critical technology. To date, no lead activities have been designated. The committee believes that, based on past achievements and current involvement, DARPA is ideally suited to take on such a lead activity role within DoD for high performance computing research and development. The committee notes that of the total Defense Department estimated funding to be spent in fiscal year 1991 on this technology, DARPA's allocation is the largest by a significant amount.

To provide the visibility necessary to ensure that high performance computing is adequately supported, the committee directs the Defense Department to establish a new program element for DARPA to include all funding previously proposed for fiscal year 1991 under the DARPA Strategic Computing project plus any additional funding provided by the Congress. The committee provides an increase of $30 million, to a total of $138.683 million, for this program for fiscal year 1991. This funding is intended to support research and development activities directly related to enhancing the national defense and also to support DARPA's participation in the Federal high performance computing program.

FIBER METAL MATRIX COMPOSITES

The committee believes that advanced materials technology, and especially the area of high temperature continuous fiber composites, continues to be of the utmost importance to the U.S. defense industrial base. Continuous fiber metal matrix reinforced composites have demonstrated superior structural performance in the stressful environments of military aircraft engines and structures. The committee believes that fiber metal matrix composites represents a typical example of a situation where the research and development of the product, fiber metal matrix composites, has proceeded far in advance of research and development on processes to manufacture the product. The committee believes that a consolidation of the design and manufacturing processes technologies is urgently required.

The National Defense Authorization Act for Fiscal Years 1990 and 1991 directed the Department of Defense to establish a cooperative venture, on a competitive basis, with a U.S. manufacturing company to develop a continuous fiber metal matrix composite model factory. The Congress directed that this program be provided $7 million in initial funding. The committee has subsequently become aware of increased emphasis on the part of Japan and Europe in this technology and believes that the U.S. should also increase its emphasis to maintain its current leading position. Accordingly, the committee provides $26 million to DARPA for continuing research and development on this important process technology.

DEFENSE NUCLEAR AGENCY PULSE POWER PROGRAMS

As described elsewhere in this report, the committee believes it has identified a number of promising areas for enhancing constructive competition in the development of new capabilities. One example is the development of electric gun technology, where the committee intends a competition to achieve performance goals between the Defense Nuclear Agency (DNA) and the Army.

The committee is pleased that the DNA, consistent with its charter revision of 1987, is beginning to apply the knowledge and experience gained in its nuclear programs to the development of technologies of potential importance to the conventional forces of all four Services.

These technologies are energetic electrothermal cartridges, very compact pulse power sources, and integrated electrothermal and electromagnetic launchers. Some of the many missions and systems to which these technologies can be applied include long-range artillery, anti-armor and anti-air warfare, ship defense, and defense against tactical ballistic missiles.

Last year, the Congress supported a variety of tests of electrothermal and electrochemical devices at DNA's pulse power facility. These tests were promising but demonstrated that there is an insufficient understanding of fundamental physics and chemistry to enable prediction and tailoring of the interaction between power pulses, plasma generation, projectile velocity, energy efficiency, and the like. Since the energy densities approach those found in nuclear environments, the committee believes that DNA, in cooperation with the Department of Energy's weapons laboratories and the Defense Advanced Research Projects Agency, should be able to apply their highly specialized skills to solve the major technology problems.

DNA's understanding of nuclear fireball physics and chemistry is relevant and essential to the development of highly energetic cartridges. DNA has developed large pulse power sources for weapons effects simulators (of electromagnetic pulse or EMP, x-rays, and gamma rays) that would be required to drive these cartridges. DNA's experience in underground tests provide a basis for developing materials of high strength and dynamic response necessary for electrothermal projectiles, sabots, and barrels. DNA also has considerable expertise in the design and operation of high velocity electromagnetic rail guns.

The committee recommends increasing DNA's electric gun technology program by $30 million for an acceleration of compact pulse power development and efforts.

In the committee's view, reasonable goals of DNA's pulse power program would be to demonstrate within 30 months after the enactment of this bill, for artillery and tank gun applications, high and consistent muzzle velocities and significantly higher electrokinetic efficiencies appropriate for use in weapons systems.

In future years, the committee believes that DoD should budget substantial funds for pulse power technologies. In view of the tremendous potential operational capabilities that these technologies provide, the committee believes they should be a prime candidate for Balanced Technology Initiative funding. In another section of this report, the committee authorizes funds and provides similar guidance for the Army's participation in this constructive competition program.

STRATEGIC DEFENSE INITIATIVE FUNDING

Through the end of fiscal year 1990, the Congress will have appropriated nearly $20 billion for the Strategic Defense Initiative (SDI), since it was formally established in 1984. During most of this period, the Congress has granted the Strategic Defense Initiative Organization (SDIO) extraordinary latitude to adjust funding within what was initially a high-technology research and exploratory development program, to maximize research progress within available funds. The program has produced a number of technologically impressive accomplishments during its tenure. However, some 2 years ago, the orientation of the SDI program began to shift from broad-based research on the feasibility of highly-effective defenses to focused development of a system of limited effectiveness that could begin to be deployed during this decade.

A Defense Science Board task force established last year to review an SDI program known as "brilliant pebbles" remarked upon this dichotomy:

> "The SDI program appears to suffer from a conflict of purpose. At times the program has emphasized research on new and

> better technologies and concepts. At other times it has emphasized deployment of a system. . . . There is not now a clear direction to SDIO about which of these objectives they are supposed to pursue and if both, as seems likely, the relative emphasis on the two.

The SDIO currently plans to develop a deployment option for a two-layered defensive system. One layer would consist of non-nuclear space-based kinetic-kill interceptors called "brilliant pebbles" which would attack Soviet missiles during their boost phase and while dispensing their multiple warheads (MIRVs). The second layer would consist of ground-launched kinetic-kill interceptors that would engage Soviet warheads during the late mid-course and terminal phases of their flight. Deployment of the space-based interceptors would violate the 1972 Anti-Ballistic Missile (ABM) Treaty. Moreover, under *both* the traditional and the broad interpretations of the Treaty, the development and testing of "brilliant pebbles" is prohibited unless it is found to be based on "Other Physical Principles" (OPP). To date, the administration has not reached a formal judgment as to whether the space-based interceptors are or are not based on OPP.

The goal of this Phase I Strategic Defense System (SDS), according to Secretary Cheney, is to be able to destroy half of the SS–18 warheads (1,540 of 3,080 currently deployed) and 40 percent of the other Soviet warheads launched during an initial strike at U.S. strategic forces and command, control, and communications (C^3) assets. At best, this would result in the destruction of only about 20 percent of the total Soviet arsenal of well over 10,000 strategic nuclear weapons. The committee notes that these are approximately the same percentage reductions that the Soviet Union would be obliged to make under the proposed START agreement.

The cost of the Phase I system designed to meet this goal is now estimated by SDIO to be $69 billion, measured in then-year dollars. Of the $20 billion appropriated for the SDI to date, less than $2 billion has been spent on research on Phase I, so that most of the $69 billion is yet to be authorized and appropriated.

Moreover, the $69 billion for Phase I is only part of the total funding that will be required by the SDIO through the completion of deployment of a Phase I system. During the period of full-scale development and deployment of a Phase I system, the SDIO will require substantial *additional* funds for research, and for exploratory and advanced development of follow-on, or "exotic," systems like high-powered lasers and particle beam weapons. The General Accounting Office has estimated a *part* of the additional cost of this non-Phase-I research and development, based on data provided by the SDIO, and concludes that total costs will exceed $100 billion. Reasonable extrapolations of this data suggest that the SDIO will require well over $130 billion through the completion of the deployment of a Phase I system, sometime early in the next decade.

The committee has set forth elsewhere in this report its views on the probable extent of reductions to the defense budget over the next half-dozen years. The pages of this report are replete with the already-painful reductions and deferrals that the committee has had to implement to set new directions and new priorities for the downsizing of the defense establishment. The committee is aware that budget documents currently before the Secretary of Defense would allocate $58 billion to SDI over the 6-year period covering fiscal years 1992 through 1997, despite the substantial overall reduction in the defense budget in prospect over these years. However, the committee does not have the full defense plan for that period before it. As a consequence, it cannot judge the opportunity costs of such a large allocation to SDI, in terms of the *other* defense programs that cannot be funded within the long-term plan. Therefore, the committee will address the future goals and objectives, the research plans and programs, the appropriate long-term funding level for the SDI, and the overall affordability of Phase I plans in connection with the mark-up next year of the defense authorization Act for fiscal years 1992 and 1993.

The Administration's amended budget request for DoD activities in conjunction with the SDI was $4.46 billion, plus $191.9 million for research on nuclear directed-energy weapons (NDEW) funded within the Department of Energy budget. The committee would provide $3.573 billion for SDI activities in DoD and $106.904 million for NDEW activities in the Department of Energy (as discussed elsewhere in this report.)

The committee notes that, in the SDIO's proposed allocation of fiscal year 1991 funding, the largest increase in both absolute and percentage terms is for Phase I systems. The committee is increasingly concerned that the SDIO's continuing focus on Phase I research, driven by a deadline calling for an "informed decision" in the summer of 1993, is leading to an unbalanced program. The committee is also concerned that the SDIO, in adapting to budget reductions for fiscal year 1991, will further unbalance the program, through disproportionate reductions to follow-on research activities, in an effort to focus available resources on Phase I systems. The committee notes a high degree of concurrency in the plan for development and testing of "brilliant pebbles," and further notes that the DSB review of "brilliant pebbles" reflects the same concerns:

> "Although the SDI is supposed to be a research and development program, the "build" model has been applied and has led to fixing the system design too early, before adequate exploration of alternative technologies was completed."

The DSB recommended in its summary comment that:

> ". . . both the Brilliant Pebbles program at Livermore and the current baseline program in the Air Force be continued until the critical issues are resolved and differences quantified, a process estimated to take about 2 years."

The committee wishes to make clear that it does *not* endorse an arbitrary deadline for an "informed decision," and affirms its guidance to the Department of Defense that, in the current environment, there is no need to incur the higher risks, and often higher costs, of highly-concurrent "crash" programs, whether in the various phases of development or overlapping development and production.

The committee has repeatedly requested the SDIO to prepare an evaluation of the cost and capabilities of a limited defense system that would be fully compliant with the traditional interpretation of the ABM Treaty. That request has been repeatedly ignored. The committee therefore directs the SDIO to prepare such an evaluation, in both classified and unclassified form, and to include that evaluation as an additional section in the next annual report required under section 224 of the National Defense Authorization Act for Fiscal Years 1990 and 1991.

SDI DEVELOPMENT AND TESTING RESTRICTION

Appendix C of the May 1990 SDIO report, which was submitted to the Congress by Secretary Cheney on June 7, 1990, contains the following unclassified statement: "Currently, no experiment has been approved which would not fall within the categories used in Appendix D to the 1987 Report to Congress on the SDI."

At a hearing of the Strategic Forces and Nuclear Deterrence Subcommittee on June 20, 1990, Dr. Charles M. Herzfeld, the Director of Defense Research and Engineering, confirmed that this statement means that there are no SDI development or testing activities planned in fiscal year 1991, including long-lead acquisition in fiscal year 1991 of material or equipment uniquely required for such development or testing in later years, which would conflict with the agreement on the ASH compliance issue which the Congress worked out with then-National Security Adviser Frank Carlucci in 1987, as reflected in section 225 of the National Defense Authorization Act for Fiscal Years 1988 and 1989 (P.L. 100-180).

Dr. Herzfeld also confirmed that with one exception, none of the SDI experiments which require additional compliance review will entail development or testing in fiscal year 1991, or the purchase in fiscal year 1991 of material or equipment uniquely required for development or testing in later years, that would conflict with the 1987 agreement, as reflected in section 225 of P.L. 100-180. The one exception concerns flight test number nine of Brilliant Pebbles, which is still awaiting compliance review. Should that review determine that the flight test could only be conducted under the broad interpretation, Dr. Herzfeld pledged that the administration would consult with Congress and seek its approval through normal budgetary procedures. Dr. Herzfeld also stated that should the Defense Department's plans change, the Department would consult with the Congress and request its approval through normal budgetary channels. Finally, Dr. Herzfeld confirmed that the 1985 Presidential directive requiring that the SDI program be conducted according to the so-called restrictive interpretation of the ASH Treaty was still in effect.

In light of the aforementioned statement contained in Appendix C of the May 1990 SDIO Report, as further clarified by Dr. Herzfeld at the June 20 hearing, the committee agreed to adopt a provision (sec. 223) which would effectively extend section 223 in last year's Act by 1 year. The provision specifies that funds provided to the Defense Department for fiscal year 1991 and previous years for the development or testing of ASH systems or components may not be obligated or expended unless such development or testing is consistent with the development and testing described in the March 1988 SDIO Report. The committee agrees that "consistent with the development and testing described in the March 1988 SDIO Report" means development and testing which does not involve space-based or other mobile-based ASH systems or components.

The provision further specifies that funds provided to the Defense Department for fiscal year 1991 or prior years may not be obligated or expended for the acquisition of any material or equipment (including any long-lead materials, components, piece-parts, test equipment, or any modified space launch vehicle) required or to be used for the development or testing of ASH systems or components unless such material or equipment is required for development or testing consistent with the development and testing described in the May 1990 SDIO Report.

In adopting this provision, the committee agrees that nothing in this limitation is intended or may be construed to preclude SDIO or contractor planning activities (including studies, design activities, or computer simulations) related to any development or testing of ASH systems or components, including development and testing not described in the May 1990 SDIO Report.

In addition, the provision specifies that the Defense Department may request, through normal budgeting procedures, authority to acquire material or equipment related to ASH development or testing not described in the May 1990 SDIO Report. The committee directs that such requests would have to be specifically approved by the Congress in the form either of new legislation or congressional approval of a transfer of funds. The committee further directs that no such transfer of any amount take place under this provision without prior notification and congressional approval through the procedures that traditionally have governed transfers.

STRATEGIC DEFENSE SYSTEM OPERATIONAL TEST AND EVALUATION ACTIVITIES

The statement of managers accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (H. Rept. 101-331) declares "the conferees agree that the need for a Strategic Defense Initiative (SDI) operational test and evaluation activity is premature. . . . Accordingly, the conferees . . . direct the Department of Defense not to obligate any appropriated funds for such an activity until it has been formally authorized in law."

The committee has learned that a Strategic Defense System (SDS) operational test and evaluation unit within the Office of Operational Test and Evaluation apparently continues to be actively supporting SDI test activities in anticipation of a Phase I deployment. Since the Department has chosen to ignore the direction provided by the conferees in the statement of managers accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991, the committee, in section 224, prohibits in law any expenditure of funds for any operational test and evaluation activity in support of any aspect of the SDI until such activity has been formally requested and specifically authorized in law.

BALLISTIC MISSILE TACTICAL WARNING/ATTACK ASSESSMENT

The amended fiscal year 1991 budget request for the Strategic Defense Initiative included $402 million for the Boost Surveillance and Tracking Satellite (BSTS). Of that amount, $137 million was requested to continue advanced development and $265 million was requested to initiate full-scale engineering development. The committee recommends authorization of $137 million in advanced development funding and denial of full-scale development funds.

It now appears that the administration plans to drop BSTS from the SDIO's Phase I Architecture. The administration still plans, however, to pursue a Tactical Warning/Attack Assessment (TW/AA) satellite as a follow-on to the Defense Support Program (DSP). The committee supports these plans, but believes it is premature to proceed to full-scale development in fiscal year 1991 for several reasons.

First, if SDIO no longer requires BSTS, it is inappropriate for SDIO to continue funding this program. The Air Force should assume this responsibility. Currently, however, the Air Force budget does not include sufficient outyear funds for BSTS. Accordingly, the committee believes Congress should wait until the submission of the fiscal years 1992–1997 Six Year Defense Program before making any decision regarding full-scale development of BSTS, to ensure that the Air Force can afford the program and fully supports it.

Second, the full-scale development program submitted to the Congress was based in part on satisfying SDIO requirements for boost-phase ballistic missile intercept. The Congress should not approve full-scale development until it is informed in detail of how TW/AA requirements, costs, schedules, and ASH Treaty compliance matters are changed as a result of dropping the SDI mission and requirements. The committee believes another review of TW/AA requirements is fully warranted. The committee understands that this review is being conducted late in fiscal year 1990. The committee also understands that this review is considering both requirements and affordability.

Third, consistent with its policy initiative of encouraging innovative and constructive competition, the committee believes the Air Force should include the "Information satellite" or "infosat" concept (formerly referred to as "brilliant eyes") in the competition for a DSP follow-on. The concept is attractive because it distributes sensors over a large number of spacecraft, which may enhance survivability, reduce launch costs, and increase launch flexibility. In addition, the large numbers may permit competitive procurement. As noted elsewhere in this report, the committee encourages competition for missions between smaller, distributed "lightsat" concepts and traditional large, complex, and individually expensive satellites—recognizing that this is but one possible approach to reducing the high cost and lack of responsiveness of satellites and launch vehicles.

The recent Defense Science Board report on Brilliant Pebbles states that "one interesting possibility is the use of Brilliant Pebbles technology for a distributed boost surveillance system. This idea should be given further consideration, but we believe that the satellite elements should be designed for the purpose and not necessarily derived directly from Brilliant Pebbles."

Accordingly, the committee recommends the following actions. The Secretary of Defense is directed to transfer funding responsibilities for BSTS from SDIO to the Air Force. The Department of Defense is directed to incorporate a review of TW/AA and other mission requirements and affordability in its on-going review, if this is not already being done. Funding for and authority to proceed into full-scale development on BSTS in fiscal year 1991 is specifically denied. The Air Force is directed to initiate a competition for a DSP follow-on capability and should include such systems technologies as BSTS, an improved DSP, and the infosat concept. The findings of the aforementioned requirements review should be the basis for the competition. The $137 million requested for BSTS advanced development is transferred to the Air Force, and, together with an additional authorization of $15 million, is to be used to continue advanced development acitivities and to conduct the DSP follow-on competition.

The Secretary of Defense shall submit a report by March 15, 1991 to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives containing DSP follow-on program plans, requirements, Six-Year Defense Program resources, and plans for competing the program. This report will be the basis for considering either a full-scale development request in fiscal year 1992 or a continuation of development of other promising concepts.

JOINT DOD–DOE MUNITIONS TECHNOLOGY DEVELOPMENT

The joint DoD–DoE munitions technology development program provides funds to enable the Department of Defense to call upon the highly specialized skills resident in the Department of Energy's three weapons laboratories (Lawrence-Livermore National Laboratory, Los Alamos National Laboratory, and Sandia National Laboratory) for research, consultations, and testing of advanced conventional munitions. The program has been highly successful, and the requests for assistance annually exceed the available resources. The National Defense Authorization Act for Fiscal Years 1990 and 1991 authorized a funding level of $25 million in fiscal year 1990 and $30 million in fiscal year 1991. The committee believes this is still the appropriate level for this program, and anticipates that portions of the program's funds can be used in support of the committee's "constructive competition" initiative. Accordingly, the committee increases the requested amount of $8.522 million by $21.478 million to authorize a total for this program of $30 million.

DISTRIBUTED WARFIGHTING SIMULATION SYSTEM

Two years ago, the Defense Advanced Research Projects Agency, in response to a request from the Commander in Chief of the U.S. European Command, launched a program to field a distributed warfighting simulation system. The program was intended to link together the various NATO command headquarters for simultaneous conferences, and to link the headquarters with the wargaming systems developed by the Warrior Preparation Center. The demonstration proved to be extremely successful. For the first time in NATO's history, Army, Navy and Air Force commanders and their staffs were able to conduct a comprehensive exercise from their individual wartime headquarters against opposition forces in a nonscripted scenario.

Perhaps the most important development of the program was to illustrate that today's technology permits wargaming and simulation on the same command and control equipment that will be used in wartime. Such distributed warfighting simulation capability offers the first possibility to bridge the historic interoperability problems in NATO's command and control systems.

As NATO evolves and public attitudes permit less field training and exercises, such distributed wargaming simulations offer the most viable way to keep U.S. commanders and their staffs ready to go to war on short notice.

The amended budget request largely funds the development efforts required to continue the program. However, certain elements of the program have been deferred for lack of funding. Consequently, the committee recommends an increase in authorization of $5 million (Project EE21 in Program Element 603226E) to fully fund the demonstration.

LIGHTSAT

The Defense Advanced Research Projects Agency (DARPA), in cooperation with the Military Departments and industry, has established an innovative and promising technology program for small space launch vehicles and satellites. This program is an excellent example of the constructive competition concept that the committee believes should be pursued. The intent of DARPA's Lightsat program is similar to the competition the committee recommends elsewhere in this report between the current Defense Support Program follow-on competitors and the Strategic Defense Initiative Organization's (SDIO) brilliant pebbles-derived technology.

The DARPA Lightsat and launch vehicle program represents a timely departure from the trend towards ever larger, more complex, multipurpose satellites that are very costly, in time and resources, to launch, and which can be procured only in small quantities. These small satellite and launcher technologies have the potential to provide more flexible, responsive, and survivable support for the unified and specified commands in a number of areas, particularly communications and sensor systems.

The committee applauds DoD for supporting this initiative. The committee notes that the program faces a shortfall of $6 million in fiscal year 1991. In view of the potential impact of this program, the committee recommends an increase of $6 million to the request of $29 million, for an authorization total of $35 million.

DARPA PRE-COMPETITIVE TECHNOLOGY DEVELOPMENT

The United States' dominant international position in science, technology, and manufacturing, firmly established following World War II, has declined significantly during recent years. The committee believes that if the United States is to maintain the scientific and technological capabilities needed to remain a military and economic superpower, the Nation's government, industry, and academic research and development organizations must find better ways to cooperate in meeting the challenge of many other nations which now have world-class technological capabilities.

The committee recognizes that complex manufacturing processes and sophisticated new products will require ever more costly research and development efforts at ever greater risks. The congressional authorization in December 1987 to establish the SEMATECH consortium to develop next-generation semiconductors reflects this reality. Many of the products emerging from current research and development in advanced materials, superconductors, optoelectronics, biotechnology, and other generic technologies will require levels of cooperation beyond that demanded by SEMATECH.

The committee believes that one of the demonstrated strengths of foreign development efforts is a greater reliance on cooperative research and development in the early "pre-competitive" stage. This cooperation, often carried out using consortia, permits joint access to research results that individual participants could not afford on their own. It also provides an opportunity for scientists and engineers to interact with people from other firms and to share ideas and expertise.

The most recent Department of Defense Critical Technologies Plan identified 20 technologies critical to the national defense. The Department of Commerce also recently completed a survey of technologies which have a potential of $350 billion in annual sales in the United States by the year 2000, and a world market approaching $1 trillion. A comparison of the technologies identified in these two reports shows a considerable overlap where increased attention could benefit both military and civilian capabilities.

The committee believes that the Department of Defense must continue to take a lead role in establishing cooperative research and development undertakings for these critical generic technologies. The Defense Advanced Research Projects Agency (DARPA) has performed this role in the past and is ideally suited to take the lead establishing new consortia and other cooperative arrangements. The committee believes that the authority granted to DARPA in the National Defense Authorization Act for Fiscal Years 1990 and 1991, which permits DARPA to enter into "cooperative agreements" and "other transactions", gives it added flexibility that further supports it taking on a leading role. The committee therefore provides $100 million to fund DARPA's participation in not less than five consortia that the Director of DARPA believes are most appropriate to promote development of critical dual-use technologies.

In order to maintain oversight of DARPA's implementation of this program, the committee directs that DARPA submit, within 120 days after the signing of the bill, a report to the Congress indicating the cooperative arrangements and consortia agreements the agency foresees, at that time, that it will enter into during fiscal years 1991 and 1992. This report should be based on initial evaluations and contacts with potential participants and should reflect where DARPA intends to continue its efforts using more formal procedures. The report should also include a full explanation of the rationale leading to these selections and how DARPA participation in these cooperative agreements or consortia will enhance the U.S. capability in a critical generic technology.

The committee also directs that the Armed Services Committees and the Appropriations Committees of the Senate and the House of Representatives be notified 30 days in advance of the signing of any cooperative arrangement, or any agreement to enter into a partnership or consortium, under this authority. This notification should include a description of the research and development to be undertaken; identification of all members included in the particular cooperative agreement or consortium; the nature of the DARPA participation, including any agreement for pro-rata cost sharing; the expected duration of government participation and, where appropriate, a firm sunset date for such participation when deemed appropriate by the Director of DARPA.

Section 841 directs that $100 million from the unobligated balance of the National Defense Stockpile Transaction Fund be transferred to the Department of Defense account established under section 251 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 to be used as the source of the funds to cover the first-year costs of this initiative.

Section 841 would also reduce the fiscal year 1991 authorization for acquisition and upgrade of materials in the National Defense Stockpile contained in the National Defense Authorization Act for Fiscal Years 1990 and 1991 from $180 million to $120 million. The committee believes that the slow pace of program execution in the National Defense Stockpile during the current fiscal year warrants this adjustment to the fiscal year 1991 program. The committee intends to review the statutory basis and operation of the National Defense Stockpile during the coming year.

ADVANCED SUBMARINE TECHNOLOGY

For fiscal year 1990, the Congress authorized $95 million for advanced submarine technology as the third year of an expected five-year program to explore innovative concepts in such areas as materials, hydrodynamics, automation, mechanical systems (including propulsion), electrical systems, and structural acoustics. The Administration request included no funds to continue this Defense Advanced Research Projects Agency program in fiscal year 1991. This was true despite the fact that the Navy's report on this subject indicates that some very useful technologies have been and are being transferred to the Navy from this program. The committee understands that money has been requested in the Six Year Defense Program for fiscal years 1992 through 1997. The absence of funding in fiscal year 1991 could lead to significant perturbations or even cancellations of important programs.

The committee continues to support exploring innovative concepts aimed at ensuring that the U.S. technological lead in submarines is maintained or enhanced. The committee recommends authorization of $95 million in fiscal year 1991 to continue this important program.

PRODUCT DATA EXCHANGE SPECIFICATION

The committee continues to support joint industry-government efforts to accelerate the development and implementation of product data exchange specifications (PDES). The committee urges the Secretary of Defense to continue to assist this important effort and to fully integrate it with the DoD computer aided acquisition and logistics support (CALS) program.

BALANCED TECHNOLOGY INITIATIVE

The National Defense Authorization Act for Fiscal Years 1990 and 1991 called for a major realignment of the Balanced Technology Initiative (BTI) program with the intent that DoD re-establish the original purpose of the program. The Department of Defense is to be commended on the prompt and vigorous action it has already taken in making changes to the program in response to the committee's concerns.

The committee believes that the need for a flexible and responsive program, such as BTI, remains clear in these times of changing national defense priorities. The BTI program provides a valuable tool for placing greater emphasis on innovative concepts that meet today's changing worldwide threat. This particularly applies to systems and capabilities that offer the prospect of "breakthrough" or "leapfrogging" capabilities.

The committee urges the Director of Defense Research and Engineering to continue his direct involvement in the BTI program and supports his initiatives to define the role of the BTI program in terms of an overall Defense Department technology investment strategy. The committee recommends authorization of the full amount requested by DoD for fiscal year 1991.

AIR DEFENSE INITIATIVE

The amended defense budget request included $246.92 million for the Air Defense Initiative (ADI). The committee recommends an authorization of $155 million, a reduction of $91.92 million from the request.

The committee believes that the ADI program office has attempted to comply with congressional direction to emphasize tactical warning/attack assessment (TW/AA) capabilities, rather than engagement technologies, against advanced air-breathing threats. However, the committee finds that the balance of efforts remains unduly on non-TW/AA technologies. Small real growth in the ADI program also is consistent with the committee's recommendations with respect to SDI.

The committee recommends a review of ADI goals, the threat against which the program is working, and the relationship between these goals, threats, and ADI technology programs. The committee at this time supports ADI's TW/AA endeavors, the advanced radar testbed, the advanced backscatter program, and the ASW-related efforts.

The committee notes that the ADI program has provided substantial funds to develop the Low-Low Frequency Acoustics (LLFA) project. Proof-of-principle tests are scheduled for fiscal year 1992. The committee believes this technology has potential applications beyond the ADI program, and the committee sees no point in developing the technology without also conducting the proof-of-principle tests as scheduled. The committee directs the ADI program and the Navy to identify and make available a suitable platform for the conduct of these tests.

NON-ACOUSTIC ANTI-SUBMARINE WARFARE

In 1989, the Congress transferred DARPA's non-acoustic antisubmarine warfare (NAASW) program to the Office of the Under Secretary of Defense for Acquisition (USD(A)) and tasked DoD to develop a long-term, integrated research plan. This plan was approved and submitted in May 1990, well after the submission of the amended fiscal year 1991 budget request.

While substantial funding has been proposed for fiscal year 1992 and beyond, a shortfall exists in fiscal year 1991. Accordingly, the committee recommends an authorization of $30 million for the OSD NAASW program. The committee directs that OSD ensure that the Navy's NAASW program is administered consistent with the priorities and objectives of the plan submitted to the Congress this year. The committee also expects full coordination and cooperation between USD(A), the Navy, the SSBN Security Program, the Central Intelligence Agency, and the Office of the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence.

The committee directs USD(A) to ensure that the NAASW program office has sufficient staffing for effective management and oversight.

The committee is pleased that the Navy has begun to implement the recommendations of the advisory panel to the House Armed Services Committee with respect to ASW. The committee notes also the Navy's renewed interest in NAASW and its effective cooperation with the OSD NAASW program office, other government agencies, and government contractors. For the time being, however, the committee believes this national program should be centrally coordinated.

In terms of policy guidance, the committee believes this program must (1) establish a scientific understanding of signature strengths and detection potential in support of intelligence assessments and vulnerability analyses; and (2) provide a technical base, if possible, for development of U.S. ASW capabilities.

LONG RANGE CONVENTIONAL STAND-OFF WEAPON

The amended budget request includes $55.4 million for the Long Range Conventional Stand-off Weapon (LRCSW) under the Joint Stand-off Weapon program. The LRCSW program is designed to develop a very long-range, conventionally-armed cruise missile with exceptional accuracy.

The Defense Department has proposed this program for some time with no compelling justification. The Department has been unable to explain what conventional targets lie 2,000 miles behind enemy lines that must be struck with a weapon that has one meter accuracy. In the committee's view, the LRCSW weapon is clearly technology in search of a rationale.

The committee has long advocated stand-off weapons, primarily to permit the launching aircraft to remain outside the reach of enemy air defenses. The committee notes its disappointment that so little progress has been made in fielding stand-off munitions. The committee would be gratified if the Services would strive for a much more practical and realistic objective for stand-off weapons than is contemplated in the LRCSW program.

INTEGRATED TACTICAL-STRATEGIC DATA NETWORKING

In 1989, the Intelligence Communications Architecture (INCA) Project Office of the Defense Intelligence Agency demonstrated the feasibility of linking automated information systems at all echelons and all functional areas over common inter-connected networks. This networking of tactical and strategic data systems was accomplished at very low cost by integrating non-developmental item components with existing military communications systems, common computer-to-computer communications security systems such as the Blacker System, and standard government open system inter-connection protocols.

Interconnecting data systems of all echelons over a common, multi-media communications network can significantly improve all military functions while avoiding duplicative expenditures for separate, dedicated communications systems. This networking concept appears to be equally valuable for operating forces and administrative activities. By eliminating many dedicated, single-thread communications lines, survivability would be improved and existing communications systems would be used more efficiently.

Finally, this concept appears to provide an inexpensive method for rapidly mobilizing civilian and commercial communications resources in a time of national emergency. This potential should be of interest to the U.S. Space Command, the Federal Emergency Management Agency, and other government agencies and departments with emergency communications mobilization requirements.

As a matter of policy, the committee urges the Department of Defense to require that this networking architecture be used for automated information system communications at all echelons to support all military functions unless a convincing case is made for an exception based on cost-effectiveness or operational grounds. The committee directs the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence to assess this policy recommendation and its operational and resource implications. The committee will expect the Assistant Secretary to review the results of this assessment in testimony next year.

SR-71

Last year, the administration proposed and the Congress agreed to terminate operations of the SR-71 reconnaissance aircraft. At the time, the committee expressed its concern that the SR-71 was the only viable airborne reconnaissance asset available and that it was unwise to terminate it until a long-term modernization plan was adopted. Nonetheless, budget pressures led the committee to reluctantly agree to terminate the program.

At that time, the Congress directed the Department to develop a viable long-term roadmap for airborne reconnaissance. The Department has not done that and will not have that roadmap available until next year. Even then, the Department has proposed to initiate an extraordinarily expensive effort to reproduce the capabilities inherent in the SR-71. The committee cannot endorse that request when the Department hasn't even produced the roadmap to determine the future of airborne reconnaissance.

The committee does not recommend that the SR-71 program be reestablished at this time. The SR-71 operations have been terminated and are not being restarted. But the committee understands that $10.3 million is sufficient to preserve an option to re-establish an SR-71 capability. By that time, the committee will have received the Department's master plan and will be able to evaluate the value of continuing to maintain a modest SR-71 contingency capability or proceeding with an expensive new capability.

BATTLE GROUP PASSIVE HORIZON EXTENSION SYSTEM SURFACE TERMINAL

The Navy and the Tactical Cryptologic Program (TCP) have been working for several years to agree on the capability and configuration of a surface terminal to complement the airborne component of the Navy's Battle Group Passive Horizon Extension System (BGPHES). The committee has been informed that the two organizations recently developed a common approach to this issue, though the TCP has agreed only to fund R&D through fiscal year 1992. The Navy will have to program an additional $30 million through fiscal year 1994.

While the Navy and the TCP have ironed out immediate differences, major unresolved issues remain which preclude an endorsement of the program. The committee recommends that no funds be authorized for the BGPHES Surface terminal until the Navy and the TCP are able to fully identify the program and the total program costs. The committee believes that future approval will depend on full funding for the program in the Six Year Defense Program.

The amended budget request also included $5.2 million in Other Procurement, Navy, for procuring the interface units to link the BGPHES surface terminal with the ES-3 aircraft. In light of the ongoing uncertainty associated with the BGPHES program, the committee recommends that no funds be authorized to procure these interface devices in fiscal year 1991.

ALLIED COOPERATIVE RESEARCH AND DEVELOPMENT

The committee continues to strongly support cooperative research and development between the United States and its NATO and major non-NATO allies. Despite the recent problems experienced by some cooperative programs, this approach to acquisition remains a cost-effective option for the development of common defense equipment.

Although the threat of a Warsaw Pact invasion of Western Europe has significantly diminished, defense spending by the United States and its allies will also decline. Growing constraints on U.S. and allied defense budgets should encourage countries to accept compromises on weapons' requirements and to share the costs of developing common responses to those requirements. In this way, even though the total cost of a cooperative project may be more than the cost of a similar single-country project, each nation's share of the cooperative project's cost will likely be less.

The committee urges the senior leadership of the Department of Defense to take the management steps necessary to reinvigorate interest in cooperative R&D. In the past, the committee has emphasized several management practices that are important to a healthy program of cooperative R&D: a steady, predictable level of funding; disciplined use of the cooperative opportunities planning process; pursuing projects that are of substantial conventional military value and interest to the military Services; lean, flexible management structures for the individual cooperative projects; and preventing duplication between cooperative projects and highly classified U.S.-only projects.

The Secretary of Defense and his immediate subordinates, especially the Under Secretary of Defense (Acquisition), should intensify their efforts to apply these management practices. At the same time, the committee realizes that the Congress can contribute to stronger management of the cooperative R&D program by providing consistent, clear guidance to the Defense Department.

SPECIAL OPERATIONS FORCES

The committee recommends a package of funding initiatives to strengthen the capabilities of U.S. special operations forces. The background and procurement items of this package are explained in title I of this report.

The following are the research and development activities that would receive additional funding in this package:

1. *AC-130 gunship munitions ($9.0 million).*—These funds would be used for development of a precision 105mm round, a 40mm armor piercing round, and fuzes for 20mm and 25mm rounds for the guns on AC-130 gunship aircraft.

2. *MH-47E and MH-60K helicopters ($11.3 million).*—This initiative would fund the development of the common avionics of the MH-47E and MH-60K helicopters that was to have been performed in the V-22 aircraft program.

3. *General support for Assistant Secretary of Defense (Special Operations and Low Intensity Conflict) ($2.0 million).*—This initiative would establish a small research and analysis account, like those already in the Defense Department budget for similar offices, for the Office of the Assistant Secretary of Defense (Special Operations and Low Intensity Conflict).

4. *Technical Support Working Group ($3.0 million).*—These funds would enable the Department of Defense to contribute to the important work of the Technical Support Working Group, an interagency committee that coordinates and funds counter-terrorist research and development programs. In light of the increasing technical sophistication of terrorist organizations, the committee believes that funding for counter-terrorist R&D activities should be a high priority. The Technical Support Working Group has an exem-

plary record of providing seed money for projects that were subsequently approved and funded by other government agencies. In order to ensure that this activity is properly funded, the committee directs the Departments of Defense and State to review and, if necessary, revise the funding arrangements for the Technical Support Working Group.

JOINT PROGRAM OFFICE FOR INTEROPERABLE WARFIGHTING SIMULATIONS AND TRAINING

After extensive review, the committee has concluded that the likely expansion of the use of simulation, and especially the creation of networks of existing simulation systems, demand a more comprehensive management approach within the Department of Defense. Specifically, the Department needs a central office to coordinate simulation policy, to establish interoperability standards and protocols, to promote simulation within the Military Departments, and to establish guidelines and objectives for coordinating simulation, wargaming, and training.

The committee believes that first priority should go to establishing connectivity among existing models, simulations, and wargames, and to establish interoperabilitiy standards and protocols for future simulations, wargames, and models.

Because of the many simulation activities currently underway within the Department, the committee believes that it is imperative to create the central program office as soon as possible. Implementing these activities will take resources not included in the amended budget request. Consequently, the committee recommends an authorization of $25 million in fiscal year 1991 for a joint management office to promote simulation and wargaming.

SOLID ROCKET DEMILITARIZATION RESEARCH AND DEVELOPMENT

In its report accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee noted its concern over the lack of attention paid by the Defense Department to demilitarization of solid propellant rocket motors in an environmentally benign manner.

The committee continues to believe that the Department is not directing sufficient attention or resources to finding environmentally acceptable ways to dispose of these motors. Approaches currently used, including open detonation and static firing, are not environmentally acceptable, and no acceptable approach has yet to be demonstrated.

The committee is aware that the military Services are investigating at a low level alternative technologies which may provide the desired capability. The committee believes that these efforts should be better coordinated and given oversight management by the Director of Defense Research and Engineering (DDR&E). The committee therefore directs that the DDR&E establish a consolidated research and development program to find environmentally acceptable ways to demilitarize solid rocket motors. The committee further directs that of the funds provided in title II of the bill for basic research, exploratory development, and advanced technology on rocket motor propellants and explosives, $3 million be made available to support this program.

RESEARCH ON PSEUDOMORPHIC MATERIALS

The committee is aware of the research activities conducted within the Department of Defense on pseudomorphic materials and related approaches to molecular electronics. The committee believes this work holds significant promise for advances in high-speed computing and fast high-density memory technologies. The committee encourages the Department to continue this research and notes that it has the potential to benefit several defense critical technologies.

REDUCING LOGISTICS BURDENS

Over the years, U.S. conventional weapon systems and tactical combat units have become extremely heavy and maintenance-intensive. In the last 10 years, for example, U.S. Army divisions have gained between 40 and 90 percent in weight. U.S. tactical aircraft depend on extensive support facilities and capabilities. The "tooth" of U.S. combat capability has not grown appreciably, while the "tail" has grown substantially.

When asked to comment on these observations, the Military Departments invariably refer to the advantages that some future weapon system will produce through greater reliability and improved maintenance concepts. No one apparently is studying ways to reduce today's logistics burdens. The Services devote most of their research and development resources to more sophisticated and capable future systems and virtually nothing to finding ways to lower the ownership costs associated with existing weapon systems.

As the budget shrinks in future years, it is imperative that the Department save as much "tooth" as possible and remove needless "tail." The committee has concluded that the Secretary of Defense should initiate a comprehensive review of opportunities available for reducing logistics burdens associated with existing weapons and support equipment. For that purpose, the committee recommends an authorization of $5 million to be used to conduct independent studies of ways to reduce the logistics burdens. The committee believes the Secretary should devote special attention to finding ways to reduce the weight of combat and support units and equipment.

TITLE III—OPERATION AND MAINTENANCE

The amended defense budget request for fiscal year 1991 included $90,069.7 million for operation and maintenance of the Armed Forces and the component agencies of the Department of Defense in fiscal year 1991, and $2,228.2 million for revolving and management funds.

The committee recommends authorization of $86,136.1 million for the operation and maintenance (O&M) accounts, a reduction of $3,933.6 million from the amended budget request. The committee also recommends authorization of $1,584.2 million for the revolving and management funds, a reduction of $644.0 million from the budget request.

The recommended authorization for the operation and maintenance accounts for fiscal year 1991 is summarized in the following table.

SUMMARY OF
OPERATION AND MAINTENANCE
CHANGES

	FY 1990 ESTIMATE	FY 1991 AMENDED REQUEST	FY 1991 AUTHORIZED	FY91 AUTH. +/- TO FY91 REQUEST
	AMOUNT	AMOUNT	AMOUNT	AMOUNT
ARMY	22,810,189	23,562,900	22,110,045	-1,452,855
NAVY	24,559,550	24,531,600	23,359,084	-1,172,516
MARINE CORPS	1,808,726	1,948,100	1,892,700	-55,400
AIR FORCE	21,787,613	22,048,900	20,856,814	-1,192,086
DEFENSE AGENCIES	7,835,606	8,663,100	8,373,663	-289,437
ARMY RESERVE	872,069	890,400	886,100	-4,300
NAVY RESERVE	923,476	984,600	977,800	-6,800
MARINE CORPS RESERVE	77,363	86,100	84,800	-1,300
AIR FORCE RESERVE	1,008,500	1,042,500	1,057,600	15,100
ARMY NATIONAL GUARD	1,859,063	1,988,500	1,970,400	-18,100
AIR NATIONAL GUARD	2,021,499	2,175,400	2,219,600	44,200
INSPECTOR GENERAL	96,800	98,519	98,519	0
DRUG INTERDICTION, DEFENSE	444,237	1,207,900	1,207,900	0
RIFLE PRACTICE, ARMY	4,633	5,600	5,600	0
U.S. COURT OF MILITARY APPEALS, DEFENSE	3,945	5,600	5,500	-100
ENVIRONMENTAL RESTORATION FUND, DEFENSE	601,100	817,000	1,017,000	200,000
HUMANITARIAN ASSISTANCE	12,845	13,000	13,000	0
TOTAL	86,727,214	90,069,719	86,136,125	-3,933,594

The committee's adjustments to the fiscal year 1991 operation and maintenance accounts are summarized below.

FUNDING ADJUSTMENTS

Flexible Readiness.—The committee recommends a reduction of $392 million to the overall budget request for training and operating tempo for the Army, Navy, and Air Force. The committee believes that the changes in the threat and the increase in warning time justify this reduction. This reduction should not be implemented across the board by the military Services. Section 303 of the bill directs the Secretary of Defense to allocate funds authorized in title III of the bill to insure that high priority military forces are maintained at appropriate readiness levels. The designation of "high priority" should be based on the anticipated threat; the amount of projected warning time of a major contingency; the likelihood that those forces would go into battle; and the ability of the military Services to transport these forces to battle. Such high priority forces should include strategic forces, expeditionary forces, forward deployed forces, special operations forces, and certain intelligence forces. Training and operating tempo for forces other than high priority forces can be reduced based on the reduced threat and the increased warning time to prepare for contingencies or deployment. As part of this reduced operating tempo, the committee also recommends a reduction of $158 million to the military Services' depot maintenance programs.

Retirement of Older, Single-Purpose Combat Structure.—The military Services are spending approximately $1.5 billion to operate older, single-purpose weapons systems, many of which are scheduled to be retired in the outyears of the current Five Year Defense Program. In light of the changes in the threat and the reduction in the size of U.S. military forces, the committee recommends a reduction of $100 million in this area to encourage the military Services to move up the deactivation dates of some of these older, less-effective weapons systems.

Special Operations Forces Initiatives.—The committee's initiative for Special Operations Forces is discussed elsewhere in this report. As part of this initiative, the committee recommends an increase of $7.1 million in the operation and maintenance accounts. This increase will stock additional minor equipment for the Naval Special Warfare Development Group ($2.8 million); increase training for the Joint Special Operations Command ($3.0 million); and fund an operating shortfall at the School of the Americas ($1.3 million).

Greater Utilization of the Reserve Components.—The committee's initiative to increase the utilization of the National Guard and Reserves is discussed elsewhere in this report. As part of this initiative, the committee recommends a decrease of $67.0 million in the active Air Force operation and maintenance request, and an increase of $53 million and $18 million respectively in the Air National Guard and Air Force Reserve operation and maintenance requests for fighter, tanker, and airlift aircraft being transferred from the Active to the Reserve components in fiscal year 1991. The bill also contains a decrease of $49 million in the active Navy operation and maintenance request and an increase of $4.4 million in the Naval Reserve operation and maintenance request for P-3 aircraft being transferred from the active Navy to the Naval Reserve in fiscal year 1991.

Training and Education.—This category of O&M costs provides support for the training and educational requirements of military personnel, including the costs of staff, curricula, equipment, and services in such areas as recruit training, officer acquisition training, specialized skill training, and professional development education. All of the military Services have requested increases in this area despite the reductions in active duty strength contained in the fiscal year 1991 budget request. The committee recommends a reduction of $300 million to the budget request in this area to align resources with the active duty strength levels for fiscal year 1991 contained in the bill.

Recruiting, Advertising and Examining.—Although projected recruiting goals decrease in fiscal year 1991 under the Defense Department's own plans, the fiscal year 1991 budget request includes increases in recruiting and advertising costs. The reduction of $60 million recommended by the committee reduces the recruiting and advertising budgets for the military Services commensurate with the reductions in active duty strength contained in the bill.

Management Headquarters.—The committee recommends a reduction of $23.9 million for management headquarters funding as a result of the lower strength levels contained in the bill for the military Services over the next 5 years.

Civilian Personnel Hiring Freeze in fiscal year 1990.—In January 1990, Secretary Cheney imposed a hiring freeze on civilian personnel in DoD for the remainder of fiscal year 1990. This hiring freeze is estimated to reduce DoD civilian strength levels by approximately 26,735 from fiscal year 1991 budgeted levels. The committee recommends a reduction of $962.5 million to the fiscal year 1991 budget request as a result of these lower civilian personnel strength levels.

Foreign National Civilian Personnel.—Foreign national civilian employment levels in DoD have remained constant since fiscal year 1989, while the overall DoD civilian employment level has declined. In light of the anticipated reduction in U.S. forces stationed overseas, the committee recommends a reduction of 10 percent in the requested level of foreign national civilian employees for fiscal year 1991, resulting in savings of $139 million in fiscal year 1991.

Real Property Maintenance.—Real property maintenance budgets increase by over $700 million in fiscal year 1991. Of the $5.6 billion requested in this area, approximately 20 percent is currently projected to be spent overseas. The reduction of $600 million recommended by the committee will put real property maintenance funding in fiscal year 1991 below the fiscal year 1990 level in real terms.

Defense Agencies Workload.—A portion of the workload of the Defense Agencies (such as the Defense Logistics Agency, the Defense Mapping Agency, the Defense Investigative Service, and the DoD Dependents' Schools) is directly related to the size and operating tempo of the military forces. In anticipation of the reduced workload for the Defense Agencies in fiscal year 1991 that should result from the reductions in military strength and operating tempo, the committee recommends a reduction of $125 million to the Operation and Maintenance, Defense Agencies budget request.

Base Operations Support.—Base operations support is the largest single category of costs in the O&M budget. The funds provide all of the operating and support costs for U.S. military installations worldwide. Examples of activities funded in this area include installation command and administration; automated data processing services; operation and purchase of utilities; fire protection and prevention; refuse collection and disposal; security; and base supply operations. The fiscal year 1991 budget request includes an increase of $825 million in this area. The committee recommends a reduction of $262.4 million.

Environmental Restoration, Defense.—The DoD environmental restoration account has an estimated shortfall of approximately $145 million in fiscal year 1990 and $300 million in fiscal year 1991 for continuing studies and actual scheduled clean-up actions. The committee recommends an increase of $200 million to the budget request for the environmental restoration, defense account, $25 million of which is for research and development activities. DoD has identified 14,401 sites on 1,579 active installations and 7,200 sites on formerly used land with the potential for contamination. DoD has 1,192 sites which have progressed beyond the study phases and are in some stage of remediation. As a site moves from the study phase to the remediation phase, the costs for the site increase significantly. The committee urges the Defense Department to realistically assess the costs of clean-up as the sites move through the final study phases and submit a budget request that adequately reflects these rapidly and significantly increasing costs.

Command, Control, and Communications.—This category has one of the highest growth rates of any category of O&M costs. Base communications costs, for example, which include local telephone services, local leased communications, closed circuit radio/television systems, range communications, and similar services increase by approximately 12 percent, or $97 million, in fiscal year 1991. Long haul communications increase by 16 percent, or $223 million. The committee recommends a reduction of $100 million in this area.

Consolidation of Military Commissaries.—In May, 1990, Deputy Secretary of Defense Atwood announced the consolidation of the military commissaries under a single Defense Commissary Agency. DoD officials have testified that this consolidation would save $100 million in annual appropriated fund operating costs of the commissaries once fully implemented. The committee recommends a reduction of $50 million in fiscal year 1991 in anticipation of these savings in commissary operating costs.

Management of the National Defense Stockpile.—In the past, funds for the administration and operation of the National Defense Stockpile have been paid from appropriated funds. The bill contains a provision (sec. 842) which would amend current law to allow these operating costs to be paid from the funds in the national Defense Stockpile Transaction Fund, which includes all revenues from sale of excess stockpile materials. The committee has deleted the $33.2 million requested in the Operation and Maintenance, Defense Agencies budget for administration and operation of the National Defense Stockpile in fiscal year 1991.

Court of Military Appeals.—Last year, the Congress increased the size of the U.S. Court of Military Appeals from three to five members in an effort to strengthen the Court and promote stability. This increase will become effective in fiscal year 1991. While the committee believes an increase over last year's amount is needed to adequately fund the increased size of the Court, the committee is concerned about growth in costs, particularly in terms of travel, in the Court's fiscal year 1991 budget request. During fiscal year 1991, when at least two new judges will be sitting, it is important that the judges minimize travel. This will ensure that the new judges and the current judges develop the collegial relationships essential to an appellate court, and will also reduce the potential for serious delays in case processing that the Court encountered in recent years. The committee recommends a reduction of $100,000 in this area.

Office of Economic Adjustment.—The committee recommends an increase of $3.4 million to the fiscal year 1991 budget request for the Defense Department's Office of Economic Adjustment (OEA). This adjustment will increase OEA's budget for planning grants to local communities affected by DoD economic impact from $1.6 million to $4.5 million, and increase the staff of OEA by 10 spaces.

Classified Programs.—The committee recommends a series of adjustments to classified programs in fiscal year 1991 which are discussed in the classified annex to this report.

NAVAL RESERVE FACILITIES

The committee is aware that the Department of the Navy is evaluating the potential closure or realignment of the Naval Air Facility (NAF), Detroit and the Naval Air Station (NAS), South Weymouth. The Navy has stated that possible closure of these facilities will depend upon the level and type of naval force structure authorized for fiscal year 1991 and beyond.

Both of these Naval Reserve facilities currently have P-3 squadrons. In section 1413 of this bill, the committee has directed the Navy to provide the same number of P-3 aircraft to each Navy Reserve squadron as it provides to active duty squadrons. The committee also directed the transfer of 80 P-3C aircraft from the active to reserve force by September 30, 1996. The committee directed elsewhere in this report that the Navy reconsider any plans to realign or transfer existing P-3 squadrons in the Navy Reserve in light of the committee's action in this area. The Navy's decision on the closure or realignment of these two facilities should take into account this direction by the committee.

The committee is concerned that the Department of Defense has not included the necessary funds needed for operations, maintenance, and personnel at NAF, Detroit and NAS, South Weymouth in fiscal year 1991 in advance of reaching a final decision on these facilities. The committee directs the Navy to provide sufficient funds in fiscal year 1991 for base operating support, maintenance and repair of real property, and active and reserve military manpower for NAF, Detroit and NAS, South Weymouth to operate at the current level until a final decision is made on these facilities.

GROWTH AND MANAGEMENT OF SECONDARY ITEM INVENTORIES IN THE DEPARTMENT OF DEFENSE

The Department of Defense's secondary item inventories include aircraft parts, ship and submarine parts, vehicle parts, construction materials, clothing and textiles, fuel, and medical and dental supplies. These items are purchased and managed through the stock funds of the military Services and the Defense Logistics Agency. As of September 30, 1989, DoD's inventory of secondary items was valued at $109 billion.

Having adequate stocks of secondary items is a key component of the readiness and sustainability of U.S. military forces. At the same time, the large growth of secondary item inventories and persistent problems in the management of these inventories in all of the military Services have been a major concern of the committee. Both the Defense Department and the General Accounting Office (GAO) have identified defense inventory management as an activity with substantial problems requiring significant management attention and corrective action. Problems identified by both DoD and GAO include duplicative inventory due to multiple inventory levels; inadequate controls over material and equipment furnished to contractors; retention of outmoded end items and levels of stocks with no known requirements; inadequate physical security at DoD warehouses; and delays and cost overruns in computer systems being developed to improve inventory management.

The Defense Department has identified a number of proposals in the Defense Management Review to address these longstanding problems and to streamline the DoD supply system. The committee endorses these efforts.

However, the committee believes adjustments can be made in the amended budget request for fiscal year 1991 that will further encourage supply system managers in the Defense Department to address the persistent problems in the management of DoD secondary item inventories.

One-Year Moratorium on Growth in War Reserve Inventories

The Defense Department stock funds operate under a revolving fund concept. The corpus of each fund consists of inventory and cash. Sales of stock fund inventory generate cash that is used to replenish inventory levels.

The amended budget request includes $564.7 million to increase war reserve stocks of secondary items in the DoD stock funds. In light of the large past growth in DoD secondary item inventory, and in light of reductions in the size of each of the military Services, the bill does not authorize any funds for war reserve stocks of secondary items in fiscal year 1991.

Reduction in O&M Funds to Purchase Secondary Items from the Stock Funds

The amended budget request includes approximately $7.7 billion in operation and maintenance funds for operating units of the military Services to purchase secondary items from the DoD stock funds during fiscal year 1991. To reduce excessive orders of secondary items from the stock funds by operating units, and in light of the reductions in the size of the military Services, the committee recommends a reduction of $380 million, or 5 percent, in operation and maintenance funds requested to purchase inventory items from DoD's stock funds in fiscal year 1991.

Return Property Disposal Receipts to Stock Fund Managers

As of September 30, 1989, approximately $11 billion of DoD's $109 billion secondary item inventory was classified as "potential excess", meaning it could be disposed of through DoD's property disposal procedures. Indications from recent GAO reports suggest that the true amount of potential excess inventory in DoD could be even higher.

For fiscal year 1991, DoD estimates that approximately $3.2 billion of excess material will be disposed of, generating receipts of $80 million. These receipts are currently credited as offsetting receipts to the National Defense Function, and are deposited into the general fund of the Treasury.

In order to provide an incentive for DoD inventory managers to reduce storage costs for excess items, and to expedite the evaluation and disposal of items with little potential for future use, the committee directs the Department to revise DoD Instruction 7310.1 to provide that the receipts generated from sale of excess stock fund secondary item inventory be credited to the Defense stock funds. The bill includes a reduction of $250 million to the authorization request for the military Services' O&M accounts in anticipation of increased property disposal activities during fiscal year 1991. This reduction should be reimbursed to the operation and maintenance accounts from the stock funds. The committee cautions the Department to maintain controls to avoid disposing of items which will be required in the future.

Establishment of Uniform Inventory Objectives and Improved Personnel Evaluation Procedures

Section 315 of the bill would require the Defense Department to develop a single, uniform policy on the management of inventory items. This policy should limit ordering and acceptance of inventory items to only those levels that are necessary to support realistic peacetime operating needs and war reserve requirements.

GAO found that the Defense Department currently retains numerous categories of "required" stock, including current year requirements; two additional years' requirements; "safety level" stocks; additional needs estimated by users; and additional stocks to cover procurement lead times. When demand is overstated—as GAO frequently found to be the case—the result is procurement and storage of inventory far beyond what is actually needed.

A uniform inventory policy should enable the Defense Department to eliminate the acquisition and retention of such redundant stock. The committee intends that the military Services and Defense Agencies include in all but exceptional cases no more than two years of operating stocks on hand and often substantially less.

In addition, section 315 would require the Department to establish procedures to evaluate personnel who participate in the acquisition and management of inventory on the basis of their cost-cutting success as well as their ability to keep adequate inventory on hand. At present, GAO reports, inventory item managers in the Defense Department are judged primarily on the basis of their success in making parts available when they are needed. This policy appears to contribute to the problem of excess inventory.

PRIVATE CONTRACTORS INVOLVED IN ENVIRONMENTAL CLEAN-UP AND RESTORATION ACTIVITIES

Implementation of the Defense Department's environmental restoration program depends on the participation of competent private contractors experienced in environmental clean-up processes and techniques. The committee has received reports that many potential environmental response action contractors are facing difficulties obtaining insurance or legally required bonds for environmental cleanup of DoD facilities. The committee believes that these problems should be carefully identified and examined in order to avoid any impediments to the prompt and effective clean-up of DoD hazardous waste sites.

Accordingly, the committee directs the Secretary of Defense to conduct a study and report to the Committees on Armed Services of the Senate and the House of Representatives no later than February 15, 1991 on the potential liabilities of environmental response action contractors and the impact of these liabilities on the ability of the Defense Department to clean up hazardous waste sites. This study should review factors such as the risks and potential liabilities facing such contractors; the availability of normal commercial insurance, surety bonding, or other financial assurance mechanisms to cover such risks and potential liabilities; and a survey of the practices of the military Services concerning the reimbursement or indemnification of contractors in lieu of or in addition to such financial assurance requirements. In carrying out this study, the Department should consult with representatives of environmental response contractors, insurers, and sureties.

SUMMARY OF ADJUSTMENTS

The following table summarizes the committee's recommended adjustments to each of the operation and maintenance accounts for fiscal year 1991.

OPERATION AND MAINTENANCE
Fiscal Year 1991
Adjustments by Account
(Dollars in Thousands)

	ARMY	NAVY	MARINE CORPS	AIR FORCE	DEFENSE AGENCIES	INSPECTOR GENERAL	ARMY RESERVE	NAVY RESERVE	MARINE CORPS RESERVE	AIR FORCE RESERVE	ARMY NATIONAL GUARD	AIR NATIONAL GUARD	RIFLE PRACTICE ARMY	U.S. COURT OF MILITARY APPEALS	ENVIRONMENT RESTORATION DEFENSE	DRUG INTERDICTION DEFENSE	HUMANITARIAN ASSISTANCE	TOTAL
BUDGET REQUEST	23,562,900	24,531,600	1,940,100	22,048,900	8,663,100	98,519	890,400	984,600	86,100	1,042,500	1,988,500	2,175,400	5,600	5,600	817,000	1,207,900	13,000	90,060,719
Civilian personnel freeze	(334,600)	(287,800)	(20,200)	(259,200)	(60,700)													-962,500
Foreign national civilians	(83,400)	(30,600)		(22,200)	(2,800)													-138,000
Special operations forces	1,300				5,800													7,100
Increased use of Reserve forces		(49,000)		(67,000)				4,400		18,000		53,000						-40,600
Retire older weapons systems	(15,000)	(40,000)		(45,000)														-100,000
Real property maintenance	(350,000)	(100,000)		(150,000)														-600,000
Command, control and communications	(40,000)	(30,000)		(20,000)	(10,000)													-100,000
Training and education	(100,000)	(100,000)	(3,500)	(90,000)	(6,500)													-300,000
Recruiting, advertising, examining	(25,000)	(10,000)	(5,000)	(15,000)	(5,000)													-60,000
Commissary consolidation	(21,000)	(7,500)	(1,500)	(20,000)														-50,000
Base operations support	(105,000)	(22,400)	(10,000)	(125,000)														-262,400
National Defense Stockpile					(33,153)													-33,153
Inventory management	(86,100)	(142,000)	(15,200)	(88,700)	(1,400)		(4,300)	(11,200)	(1,300)	(2,900)	(18,100)	(8,800)						-380,000
Property disposal	(65,000)	(120,000)		(65,000)														-250,000
Operating tempo	(162,000)	(125,000)		(105,000)														-392,000
Depot maintenance	(25,000)	(80,000)		(45,000)														-150,000
Defense agencies workload					(125,000)													-125,000
Court of Military Appeals														(100)				-100
Office of Economic Adjustment					3,400													3,400
Environmental restoration															200,000			200,000
Management headquarters	(12,600)	(2,300)		(9,000)														-23,900
MILSTAR termination				(17,600)														-17,600
Reimbursement for outpatient care	(20,000)	(20,000)		(20,000)														-60,000
Classified Programs	(11,455)	(5,916)		(18,386)	(54,084)													-89,841
TOTAL	22,110,045	23,359,084	1,882,700	20,866,814	8,373,663	98,519	886,100	977,800	84,800	1,057,600	1,970,400	2,219,600	5,600	5,500	1,017,000	1,207,900	13,000	86,136,125

REVOLVING AND MANAGEMENT FUNDS

The defense stock funds provide for the financial management, inventory control, and distribution of consumable items of supply and low-cost equipment to support both peacetime and wartime operations. Stock fund inventories include consumable spare and repair parts used in maintenance programs to repair equipment, as well as fuel, rations, medical supplies, and general and administrative supplies necessary to maintain the readiness and sustainability of the military Services' weapon systems and personnel.

The amended defense budget request for fiscal year 1991 includes $1,834.4 million to fund war reserve stocks ($564.7 million); to finance requirements associated with implementation of Defense Management Review cost of supply operations previously funded in the procurement and O&M accounts ($1,190.4 million); and to partially repay the lapsed O&M, Air Force accounts for funds improperly withdrawn from these accounts to pay higher than budgeted fuel costs ($79.3 million).

The committee recommends authorization of $1,190.4 million. As discussed earlier, the committee recommends against authorizing any of the $564.7 million requested to fund war reserve stocks of secondary items. Also, the committee does not authorize the $79.3 million requested to partially repay the lapsed O&M, Air Force accounts as requested in the budget.

The defense industrial funds provide for the financial management of industrial activities such as depot maintenance; transportation services; base services; and other functions. Industrial fund activities receive their initial working capital either through an appropriation or from a transfer of resources from existing appropriations or funds. These activities use these resources to finance the initial cost of providing goods and services to their customers, who then reimburse the industrial fund for these services.

The defense industrial funds have experienced losses in recent years. The amended budget request includes $393.8 million to recoup the minimum level of financial resources required to sustain industrial fund operations through fiscal year 1991. The committee recommends authorization of the amount requested.

The following table summarizes the committee's recommendations for the revolving and management funds:

Revolving and Management Funds
($ in millions)

	Amended FY1991 Request	Committee Recommendation	Difference
Army Stock Fund	407.0	302.5	-104.5
Navy Stock Fund	37.2	-	-37.2
Air Force Stock Fund	1,340.2	887.9	-452.3
Defense Stock Fund	50.0	-	-50.0
Subtotal, Stock Funds	1,834.4	1,190.4	-644.0
Army Industrial Fund	151.0	151.0	-
Navy Industrial Fund	238.7	238.7	-
Defense Industrial Fund	4.0	4.0	-
Subtotal, Industrial Funds	393.8	393.8	-
Grand Total	2,228.2	1,584.2	-644.0

LEGISLATIVE PROVISIONS

FLEXIBLE READINESS

Section 303 of the bill would direct the Secretary of Defense to allocate funds authorized in title III of the bill to insure that high priority military forces are maintained at appropriate readiness levels. The designation of "high priority" should be based on the anticipated threat; the amount of projected warning time of a major contingency; the likelihood that those forces would go into battle; and the ability of the military Services to transport these forces to battle. Such high priority forces should include strategic forces, expeditionary forces, forward deployed forces, special operations forces, and certain intelligence forces.

HUMANITARIAN ASSISTANCE

The committee recommends a provision (sec. 304) that would continue the committee's initiative of recent years authorizing Defense Department transportation of humanitarian aid to Afghan refugees and to the non-communist resistance organizations in the Thai-Laos-Cambodian border region. The relevant section of the National Defense Authorization Act for Fiscal Years 1990 and 1991 is modified to make clear that $3 million should be used for humanitarian aid in the Thailand, Laos, and Cambodia border area. The committee is concerned that assistance to this region may have been inadequate during fiscal year 1990. The Department of Defense had indicated that an overall refocus of the humanitarian assistance effort was under consideration. However, no recommendations have been received, and therefore no major changes are proposed.

AUTHORIZATION OF APPROPRIATIONS FOR THE UNITED STATES SOLDIERS' AND AIRMEN'S HOME

Section 305 of the bill would authorize appropriations of $47.999 million for the operation of the United States Soldiers' and Airmen's Home in fiscal year 1991 from the Home's dedicated trust fund, the amount included in the amended budget request for this purpose. The requirement for annual authorization of this appropriation was contained in the National Defense Authorization Act for Fiscal Years 1990 and 1991.

AUTHORITY GOVERNING OPERATION OF WORKING CAPITAL FUNDED ACTIVITIES

Section 311 of the bill, requested in the Administration's Defense Management Improvement Act, would expand the current authority in 10 U.S.C. 2208(h) to authorize arsenals and other Army industrial activities to sell supplies, services, or work outside the Department of Defense if the articles to be sold may be incorporated into items to be sold to or used in contract with, or for the purposes of soliciting a contract with a friendly foreign government, or will be used in commercial expendable launch vehicles.

REPEAL OF RESTRICTION ON CONTRACTING OUT CORE LOGISTICS FUNCTIONS

The committee recommends a provision (sec. 312), requested in the Administration's Defense Management Improvement Act, that would repeal 10 U.S.C. 2464 which restricts the acquisition of "core logistics functions" by commercial contracts. Repeal of this provision will allow these functions to be reviewed for contracting out under OMB Circular A-76.

REPEAL OF PROHIBITION ON CERTAIN DEPOT MAINTENANCE WORKLOAD COMPETITIONS

Section 313 of the bill, requested in the Administration's Defense Management Improvement Act, would repeal 10 U.S.C. 2466 which currently prohibits the Army and the Air Force from competing depot maintenance tasks between the Army and the Air Force or between the Army or the Air Force and a private contractor. The committee encourages the Department to conduct competitions for depot maintenance workload among all of the military Services.

AUTHORIZATION FOR NAVAL SHIPYARDS AND AVIATION DEPOTS TO ENGAGE IN DEFENSE RELATED PRODUCTION AND SERVICES DURING FISCAL YEAR 1991

Section 314 of the bill would authorize naval aviation depots and naval shipyards to bid on defense-related production and services during fiscal year 1991. In the past, the Navy has requested the Appropriations Committees of the Senate and the House of Representatives to provide for naval depot authorization in the annual defense appropriations bill. The committee notes that this authorization language is more appropriately the subject of the defense authorization bill.

The bill would extend this authorization to the naval shipyards. The committee recognizes the ongoing need to maintain critical skills at these important industrial facilities. This concern is enhanced in that the Navy has indicated potential manpower reductions of 20,000 to 30,000 at the eight public yards. This provision will reduce training costs, help maintain critical skill levels, and maximize cost-effective utilization of these naval facilities.

The committee believes that any defense-related work undertaken pursuant to this provision should not interfere with the primary mission of the facility involved; should be of such character as to enhance critical skills; and should be cost-effective.

INVENTORY MANAGEMENT POLICIES

As discussed earlier in this report, section 315 of the bill would require the Secretary of Defense to issue a single, uniform policy on the management of inventory items by the Department. It would also establish procedures to ensure that personnel appraisal systems for item managers and other personnel responsible for the acquisition and management of inventory items give appropriate consideration to efforts to eliminate wasteful practices and achieve cost savings.

VOYAGE REPAIRS ON NAVAL RESERVE FORCE VESSELS HOMEPORTED ON THE WEST COAST

Section 316 of the bill, requested in the Administration's Defense Management Improvement Act, would restore the Secretary of the Navy's ability to permit short-term repairs for West Coast Reserve ships to be solicited only in the homeport area if adequate competition exists. This would give the Secretary the authority to manage West Coast ship maintenance operations on the same basis as those on the East and Gulf Coasts.

EXTENSION OF DATE FOR COMPLETION OF STUDY ON WASTE RECYCLING

The committee understands that the Secretary of Defense, in response to the requirements of section 361 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 and queries this year from the committee, intends to report to Congress in February 1991 on "Managing Post-Consumer Waste at DoD Facilities" and "Waste Recycling". The committee commends the Department for its examination of this issue, and recommends a provision (sec. 317) that would amend section 361 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 to change the date for submitting the report to March 1, 1991.

The committee hopes that the reports will address not only plastics, paper, used oil, and tires, but also other major elements of DoD waste streams that are recoverable. These recommendations should address the entire life-cycle of materials management, along with possible economic or institutional incentives for recycling, such as shared savings.

HURRICANE RECONNAISSANCE

Section 318 of the bill would provide that the Department of the Air Force may not cease performing its existing hurricane reconnaissance mission during fiscal year 1991 unless another agency of the United States assumes responsibility for and is funded to perform such mission.

REIMBURSEMENT OF EPA OVERSIGHT EXPENSES

Section 319 of the bill would authorize the Department of Defense to reimburse the Environmental Protection Agency for costs associated with oversight of environmental remediation at Department of Defense facilities conducted pursuant to section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and as set forth in interagency agreements entered into between the Department of Defense and the Environmental Protection Agency.

PROHIBITION ON PURCHASES OF PERFORMANCE BONDS AND SIMILAR GUARANTIES

The committee recommends a provision (sec. 320) that would prohibit the use of appropriated funds during fiscal year 1991 to obtain surety or performance bonds to guarantee the direct performance of the United States to fulfill a legal requirement.

TITLE IV—PERSONNEL AUTHORIZATIONS FOR FISCAL YEAR 1991

PART A—ACTIVE FORCES

ACTIVE DUTY END STRENGTHS

The committee's active duty end strength recommendations (sec. 401) are based on the establishment of a long-term plan of active duty end strength levels for each of the military Services at the end of fiscal year 1995. The recommended fiscal year 1995 active duty end strength levels reflect the force structure and organizational realignments that the military Services are expected to make over the next 5 years consistent with the guidelines provided in this bill.

The active duty end strengths recommended for each of the military Services for fiscal year 1991 set the military Services on a responsible glide path to achieving the recommended fiscal year 1995 active duty end strength levels. The committee believes that the military Services can attain the recommended fiscal year 1991 active duty end strength levels by prudently adjusting their intake of new recruits, selectively retiring senior personnel, and selectively releasing first term personnel before completion of their first term of service. In this regard, a regulated process for the military Services to follow in making the required active duty strength reductions in fiscal year 1991 and beyond is prescribed in section 402 of this bill.

The committee's recommendations for each military Service are shown below:

Active Duty End Strengths

	FY1991 Request	FY1991 Committee Recommendation	FY1995 Committee Recommendation
Army	727,500	704,170	510,000
Navy	584,800	568,500	500,000
Marine Corps	196,500	193,735	177,000
Air Force	530,000	510,000	415,000
Total	2,038,800	1,976,405	1,692,000

OFFICER STRENGTH LEVELS

The National Defense Authorization Act for Fiscal Year 1989 established officer end strength ceilings as a subset of total active duty end strength authorizations for each of the military Services. The officer end strength ceilings were mandated to control officer strength relative to total active duty strength. This control was necessary because the committee became aware of unjustified growth in the proportion of officer strength relative to enlisted strength and had to mandate a reduction in officer strength in order to force the Department of Defense to eliminate surpluses in officer strength it subsequently identified in each of the military Services.

The committee's recommendation (sec. 401) establishes officer end strength ceilings that keep the relationship between officer and enlisted strength consistent with the relationship reflected in the administration's request. The committee expects this relationship to guide future active duty end strength requests submitted by the administration. The committee's recommendation is shown below:

Officer End Strengths

	FY1991 Request	FY1991 Committee Recommendation
Army	102,581	99,291
Navy	71,999	69,992
Marine Corps	20,039	19,757
Air Force	98,754	95,027
Total	293,373	284,067

UNIFORM STRENGTH REDUCTION PROCESS

The committee recommends a provision (sec. 402) that would require the military Services to follow a uniform procedure for reducing active duty strength under regulations prescribed by the Secretary of Defense.

The committee's recommendation specifies that the military Services shall take strength reduction actions in the following order of precedence:

(1) limit new accession levels to the minimum required to sustain the smaller fiscal year 1995 active duty end strengths prescribed in this act;

(2) reduce the retirement eligible population consistent with senior grade requirements for the smaller fiscal year 1995 active duty end strengths prescribed in this act;

(3) reduce the first term population consistent with junior grade requirements for the smaller fiscal year 1995 active duty end strengths prescribed in this act; and

(4) reduce the mid-term career population to reach mandated strength levels for a given year only after going through the first three steps.

The committee's recommendation also specifies accession ceilings for the officer and enlisted communities of each military service in the form of percentages of officer and enlisted active duty end strengths. These percentages were developed by the Congressional Budget Office (CBO) based on continuation rates that the military Services would expect at steady-state strength levels. The committee's recommendation requires the military Services to apply these percentages to strength levels specified for fiscal year 1995 in this act in determining the maximum number of new accessions for each fiscal year preceding fiscal year 1995. The committee expects the officer and enlisted strength mix for fiscal year 1995 against which these percentages will be applied to be based on the guidance provided in this act.

The committee requests the Secretary of Defense to provide to the Committees on Armed Services of the Senate and the House of Representatives the regulation required by this section and the steady-state officer and enlisted profiles by grade and years of service for fiscal year 1995 within 90 days of enactment of this act.

GENERAL AND FLAG OFFICER ACTIVE DUTY STRENGTH CEILINGS

The committee recommends (sec. 403) a provision that would establish ceilings on the number of general and flag officers authorized to be on active duty for each of the military Services as shown below:

	Current Ceiling	FY1991 Committee Recommendation	FY1995 Committee Recommendation
Army	407	386	302
Navy	258	250	216
Marine Corps	70	68	61
Air Force	338	326	279
Total	1,073	1,030	858

The ceilings established for fiscal year 1995 are consistent with the committee's expectation that force structure and organizational realignments over the next 5 years should result in an overall force reduction of at least 25 percent. The fiscal year 1995 ceilings reflect this expectation, and the fiscal year 1991 ceilings set the military Services on a responsible course to achieve the fiscal year 1995 ceilings.

The committee also believes that these ceilings should assist the military Services in making critical decisions regarding the reduction, consolidation, and elimination of duplicative headquarters. The ceilings should also assist the military Services in eliminating unnecessary layering in the staff patterns of general and flag officer positions.

REDUCTION IN THE NUMBER OF AIR FORCE COLONELS AUTHORIZED

The committee recommends (sec. 404) a provision that would permanently reduce the number of Air Force colonels authorized under section 523 of title 10, United States Code.

The committee initially required the Air Force to temporarily reduce the number of officers authorized to be on active duty in the colonel grade because it became aware of a surplus of 250 colonels in the Military Airlift Command. The reduction was originally mandated in the National Defense Authorization Act for Fiscal Year 1989. Since then, the National Defense Authorization Act for Fiscal Years 1990 and 1991 extended the temporary reduction through fiscal year 1991 and directed in the accompanying statement of managers that the Secretary of Defense submit a report to the Committees on Armed Services of the Senate and the House of Representatives on the adequacy of existing grade limitations by March 1, 1990.

The committee has not received the directed report. Therefore, the committee recommends the temporary reduction be made permanent.

EXEMPTION FROM GRADE ACCOUNTABILITY OF CERTAIN THREE-STAR GENERAL AND FLAG OFFICER POSITIONS

The committee recommends a provision (sec. 405) that would authorize the President to designate up to six positions within the Joint Staff to be exempt from the prescribed ceiling on the number of lieutenant generals and vice admirals that a military Service may have serving on active duty.

The committee's recommendation is based on a request from the Secretary of Defense and the Chairman of the Joint Chiefs of Staff for this authority. The request was justified on the basis that such authority would encourage the military Services to actively seek the assignment of their best officers to key positions on the Joint Staff.

The intent of the committee's recommendation is to encourage competition among the military Services to nominate their best officers to fill key positions on the Joint Staff and to provide the Chairman of the Joint Chiefs of Staff greater flexibility in selecting officers recommended by the military Services to fill key positions on his staff.

The committee, in approving the request, expects that all of the military Services will compete for each position designated under authority of this section. If the committee finds that this provision is not being used for the purpose intended, the committee will reconsider this provision.

The committee notes that under section 403 of this act, the military Services are required to reduce the number of general and flag officers they have serving on active duty by 43 at the end of fiscal year 1991. The number of lieutenant generals and vice admirals that the military Services could have on active duty would be reduced by six in the aggregate as a result of the overall reduction.

The committee also notes that active duty general and flag officer end strength ceilings established for fiscal year 1995 in this act result in a reduction of lieutenant general and vice admiral grades by 25 from the fiscal year 1990 level. The full use of the exemption authority provided by this section would lower the reduction to 19 from the fiscal year 1990 level.

PART B—RESERVE FORCES

SELECTED RESERVE END STRENGTHS

The committee recommends a provision (sec. 411) that would authorize the Selected Reserve end strengths for each of the Reserve components as follows:

Selected Reserve End Strengths

	FY1991 Request	FY1991 Committee Recommendation
Army National Guard	447,300	447,300
Army Reserve	309,200	309,200
Naval Reserve	149,700	153,400
Marine Corps Reserve	43,900	44,000
Air National Guard	116,300	116,300
Air Force Reserve	85,200	85,200
Coast Guard Reserve	12,700	12,700
Totals	1,164,300	1,168,100

The committee's recommendation freezes the Selected Reserve end strengths of the Reserve components at fiscal year 1990 levels. The committee believes this action is prudent given the increasingly important role the Reserve components are expected to assume in the Total Force as the military Services restructure their forces over the next five years. The committee intends to carefully review the recommendations on the force structure and force mix of the military Services in the Total Force study that is due to be submitted to the Committees on Armed Services of the Senate and the House of Representatives by December 31, 1990. Further actions by the committee on selected reserve strengths will take into consideration the results of the study.

RESERVE FULL-TIME SUPPORT END STRENGTHS

The committee recommends a provision (sec. 412) that would reduce the total authorization for members of the Reserve components serving on full-time active duty in the reserves by 7,400 from the fiscal year 1991 budget request.

The committee expects the military Services to make up the difference of the 7,400 reduction in the full-time active duty manning request by assigning Active component personnel to perform the duties in the Reserve components. The committee takes this action as the first step toward moving the mix of full-time active duty personnel in the Reserve components to a 70 percent reserve and 30 percent active relationship by the end of fiscal year 1993. To accomplish this end, the committee's recommendation would establish strengths for members of the Reserve components serving on full-time duty in the reserves for fiscal years 1992 and 1993. The committee believes its actions will strengthen the Total Force integration of Active and Reserve components as the military Services restructure over the next five years.

The committee recognizes that the varying size and utilization of the current full-time force supporting the separate Reserve components and the feasibility of using Active component personnel (such as reserve advisors to headquarters or at the seat of government) may result in one or more components being severely affected by the fiscal year 1991 end strengths prescribed. Therefore, the committee's recommendation provides authority to the Secretary of Defense to reallocate up to 10 percent of the total authorization among the Reserve components.

The committee's end strength recommendations are shown below:

Reserve Full Time Support End Strengths

	FY1991 Request	FY1991 Committee Recommendation
Army National Guard	26,199	23,581
Army Reserve	13,344	12,011
Naval Reserve	22,997	20,699
Marine Corps Reserve	3,401	2,161
Air National Guard	8,468	7,622
Air Force Reserve	655	590
Total	74,064	66,664

	FY1992	FY1993
Total End Strength Recommendations:	59,255	51,845

ACTIVE DUTY RESERVE SUPPORT GRADE CEILINGS

The committee recommends a provision (sec. 413) that would authorize the active duty reserve support grade ceilings for each military Service as shown below:

Active Duty Reserve Support Grade Ceilings

Fiscal Year 1991	Army	Navy	Air Force	Marine Corps
E-9	542	200	224	13
E-8	2,504	425	637	74
0-4	3,030	1,065	575	110
0-5	1,448	520	476	75
0-6	351	188	190	25

The committee's recommendation freezes active duty reserve support grade ceilings at the levels authorized for fiscal year 1990. The committee believes this action is consistent with its related recommendation on the reduction of Selected Reserve full-time end strengths.

PART C—MILITARY TRAINING STUDENT LOADS

The committee recommends a provision (sec. 421) that would authorize the military training student loads for each military Service and Reserve component as follows:

Authorization of Military Training Student Loads

Service/Component	FY1991 Request	FY1991 Committee Recommendation
Army	74,382	66,525
Navy	66,173	59,675
Marine Corps	23,236	20,880
Air Force	27,179	26,880
Army National Guard	16,611	16,611
Army Reserve	15,337	15,337
Naval Reserve	3,112	3,112
Marine Corps Reserve	3,520	3,520
Air National Guard	2,765	2,765
Air Force Reserve	1,628	1,628
TOTAL	233,943	216,933

The committee's recommendation approves the training loads requested for the Reserve components and reduces the loads requested for the military Services. The reductions in training loads are based on expected reductions in recruit training, officer acquisition training, and specialized skill training as new accessions are reduced to achieve the active duty military end strengths authorized for fiscal year 1991. The committee also believes that a greater degree of efficiency can be achieved in these particular training programs. For example, the committee believes that inputs to each of the military Service academies could be limited to 1,200 per year if more attention is given to reducing attrition. The committee urges the Department of Defense to reflect such initiatives in its *Military Manpower Training Report* for fiscal year 1992.

Part D—Authorization of Appropriations

AUTHORIZATION OF APPROPRIATIONS FOR MILITARY PERSONNEL FOR FISCAL YEAR 1991

The committee recommends a provision (sec. 431) which would authorize $77,553,700,000 to be appropriated for military personnel for fiscal year 1991.

Part E—Civilian Personnel

CIVILIAN END STRENGTH CEILINGS

The committee recommends a provision (sec. 441) that would authorize civilian end strengths for the Department of Defense as follows:

Authorized Civilian End Strengths

	FY1991 Request	FY1991 Committee Recommendation
Army	391,943	373,280
Navy	340,955	329,217
Air Force	258,741	247,420
Defense Agencies	104,102	98,717
Total DOD	1,095,741	1,048,634

The committee believes its recommendation is consistent with expected force structure and organizational realignments within the Department of Defense over the next 5 years that will begin to be implemented in fiscal year 1991.

TITLE V—MILITARY PERSONNEL

PART A—PERSONNEL MANAGEMENT MATTERS

AUTHORITIES TO ASSIST THE MILITARY SERVICES IN REDUCING SENIOR OFFICER STRENGTH

The committee recommends a number of provisions that would assist the military Services in reducing senior officer active duty strengths over the next 5 years. These provisions should allow the military Services to selectively reduce the retirement-eligible officer inventory and avoid disproportionate reductions in the other segments of the officer inventory.

The committee's recommendations include:

(1) a provision (sec. 501) that would (a) authorize the Secretaries of the Military Departments to select for early retirement officers in the grade of colonel or Navy captain who have 2 or more years in grade and officers in the grade of lieutenant colonel and Navy commanders who have failed of promotion in the primary zone of consideration once; and (b) authorize the Secretaries of the Military Departments to waive the current provision in law that prohibits them from considering for selective early retirement those officers who have been considered within the previous 5 years;

(2) a provision (sec. 502) that would authorize the Secretaries of the Military Departments to waive from 3 to 2 years the requirement for officers in the colonel, Navy captain, lieutenant colonel, and Navy commander grades to serve in grade in order to voluntarily retire in grade subject to a reduction in the grade authorization for each waiver granted; and

(3) a provision (sec. 503) that would authorize the Secretaries of the Military Departments to waive from 10 to 8 years the requirement for service as an officer in order to voluntarily retire as an officer.

These authorities would be provided on a temporary basis through September 30, 1995.

REPORT ON INITIAL APPOINTMENT OF OFFICERS AND ACTIVE DUTY SERVICE OBLIGATION OF GRADUATES OF THE SERVICE ACADEMIES

The committee recommends a provision (sec. 504) that would require the Secretary of Defense to report to the Committees on Armed Services of the Senate and the House of Representatives on the consequences of requiring all officers of the Armed Forces to be initially appointed as reserve officers and on the appropriate active duty service obligation for graduates of the military Service academies. The report is required within 60 days of enactment of this bill. The committee believes this review is necessary in light of the reductions that the military Services are expected to make in officer strength over the next 5 years and the officer strength management flexibility the military Services may need to make these reductions.

The committee's recommendation also provides that if the Secretary decides not to submit the report as required, all officers after the due date of the report shall be initially appointed as reserve officers and the active duty service obligation for graduates of the military Service academies after the due date of the report shall be 5 years.

PART B—OTHER MATTERS

NAVY RATION LAW

The committee recommends a provision (sec. 521) that would conform the Navy's ration law to the ration laws for the Army and Air Force.

APPOINTMENT OF CADETS AND MIDSHIPMEN

The committee recommends a provision (sec. 522) that would repeal the authority of the Administrator of the Panama Canal Commission to make nominations for appointments to the three military Service academies. This would remove an anachronistic provision dating from the time when the Canal Zone was the functional equivalent of a U.S. territory.

RECOUPMENT OF ADVANCED EDUCATIONAL ASSISTANCE FUNDS

The committee recommends a provision (sec. 523) that would amend 10 U.S.C. 2005 to clarify the authority of the Military Departments to recoup advanced educational assistance funds when an individual fails to comply with the terms and conditions of an advanced educational assistance agreement.

OFFICER PROCUREMENT PROGRAMS AND THE MANAGEMENT AND OPERATION OF THE MILITARY SERVICE ACADEMIES

In response to a request by the committee, the Congressional Budget Office (CBO) recently issued a paper dated June 1990 entitled *Officer Commissioning Programs: Cost and Officer Performance.* Also in response to a request by the committee, the General Accounting Office (GAO) is scheduled to complete a report by September 1990 on the management and operation of the military Service academies. The committee requested the GAO to include in the report the results of an investigation into allegations of academic manipulation, hazing, irregularities in the processing of separation actions, and other matters suggesting a leadership problem at the Naval Academy that came to the committee's attention after the GAO started its initial review.

The committee requested the CBO and GAO reviews in order to evaluate, as part of its oversight responsibility, how well these programs were being conducted in terms of their effectiveness and efficiency. In this regard, the Subcommittee on Manpower and Personnel conducted a hearing on April 4, 1990 at which CBO and GAO presented the interim findings of their review. Defense Department witnesses, including the superintendents of the military Service academies, also presented their views.

The committee notes that following the hearing, the Department of Defense decided to conduct its own review of the officer procurement programs of the military Services in the face of a decreasing demand for officers in the years ahead. The committee directs the Secretary of Defense to critically evaluate the CBO paper and the GAO report that should be issued in September 1990 and to submit to the committee by December 31, 1990 a report on actions taken in response to the CBO paper and the GAO report and the results of its own review.

APPOINTMENT OF THE ACADEMIC DEAN AND PROVOST AT THE NAVAL ACADEMY

Given the large percentage of civilian faculty employed by the Naval Academy, and in light of recent tensions between the faculty and the Academy administration, the committee suggests that the Secretary of the Navy institute procedures providing the permanent civilian professors with a consulting role in the selection and reappointment of individuals to the position of Academic Dean and Provost. The committee suggests that the Secretary pattern these procedures after the Postgraduate School Council that is used by the Naval Postgraduate School when selecting an Academic Dean (10 U.S.C. 7043(a)).

ETHICS INSTRUCTION AT THE MILITARY SERVICE ACADEMIES

In its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee requested the Secretary of Defense to review and report on "the degree to which ethical situations that are or could be faced by military officers in the course of their professional careers are addressed in the curricula of the Service academies."

The committee remains concerned that course work focuses inadequate attention on specific real life ethical situations that military officers will face. Topics associated with such situations include, but are not limited to, the constitutional limits on military authority, civilian/military relations in policy making, the proper response to illegal orders, and the temptation to misuse power to further personal goals.

The committee understands that the Naval Academy is instituting a required course on U.S. Government and Constitutional Development. Such a course would provide an excellent forum for the discussion of many of those issues. The committee believes that the Naval Academy should devote an appropriate amount of classroom hours in that course to address such ethical situations. The Military Academy and the Air Force Academy should also ensure that these topics are included in the appropriate courses.

The committee directs the Secretary of Defense to report to the committee by February 1, 1991 on the progress of the military Service academies in implementing this guidance.

HIGH YEAR OF TENURE POINTS FOR RETIREMENT OF ENLISTED PERSONNEL

Consistent with its recommendations to assist the military Services in reducing senior officer strength over the next 5 years, the committee directs the Secretary of Defense to prescribe regulations governing the mandatory retirement points for enlisted personnel based on grade and years of service. The committee believes the recent policy promulgated by the Air Force should be used as a guide for developing uniform policies for the military Services, with provision for waivers in critical skills. Such a policy should assist the military Services in reducing its senior grade enlisted inventory during the next 5 years.

The committee requests the Secretary of Defense to provide to the Committees on Armed Services of the Senate and the House of Representatives the regulations by December 31, 1990.

DEPARTMENT OF DEFENSE DEPENDENTS SCHOOLS AND THE PRESIDENT'S EDUCATION GOALS

In the 1990 State of the Union Address, the President announced six education goals for the Nation to reach by the year 2000. However, little guidance has been given on how we as a nation are to reach those goals. The Department of Defense Dependents School System is one of the largest single school systems educating our Nation's children, and is one of the few school systems managed by the Federal Government. The committee believes that the Nation would benefit if the Federal Government used the system as a model for reaching the President's Education Goals for the year 2000. Therefore, the committee directs the Department of Defense, in conjunction with the Department of Education and any other departments or agencies which the Secretary of Defense may consider appropriate, to develop a plan for reaching the President's education goals within the Department of Defense Dependents School System. The plan should include mechanisms for measuring progress toward those goals, and be made available to state and local school systems.

INCREASING TWO AND THREE YEAR ENLISTMENTS

The committee believes that as the military Services restructure over the next 5 years toward smaller Active components and toward greater reliance on the Reserve components the percentage of 2- and 3-year enlistments in the Active components of the military Services should be increased on a targeted basis. Therefore, the committee directs the Secretary of Defense to develop and submit to the Committees on Armed Services of the Senate and the House of Representatives by March 15, 1991, a plan to increase the number of 2- and 3-year enlistments in each military Service along the lines of the Army's two plus two plus four program.

MISMANAGEMENT OF AIR FORCE MORALE, WELFARE AND RECREATION (MWR) ACTIVITIES

In its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee directed the Secretary of Defense to report to the committee on the mismanagement of officer and NCO clubs at Ramstein Air Base documented in Department of Defense Inspector General (DODIG) and Air Force Audit Agency (AFAA) reports. The committee specifically requested the Secretary of Defense to address disciplinary and corrective actions taken in response to these reports.

The committee has since received a synopsis of an AFAA report (project 9285112) that indicates that Air Force management of MWR activities has deteriorated further. Coming on the heels of the serious problems identified last year, this latest audit report is very disturbing. The synopsis of the audit report indicated:

> "We [AFAA] concluded that Air Force oversight and control of MWR revenue generating activities was not adequate, and MWR operations were not in compliance with congressional guidance and applicable regulations governing the areas reviewed . . . this report shows that the conditions disclosed in AFAA Report of Audit 302114, Management of Appropriated Fund Support for Moral, Welfare, and Recreation Activities 8 May 1984, *still exist and have deteriorated.*" [emphasis added]

The synopsis further indicated:

> "Many of the problems highlighted in this synopsis are not new. They have been identified in prior AFAA, DOD, IG, and GAO audit reports, and in congressional testimony. Although we are making recommendations for improving directive guidance, in our view this is not where the major problem lies. The control and oversight process is not working and needs attention."

The committee is disappointed that the Department of Defense has ignored the problems in Air Force MWR that the committee brought to its attention. The committee expects the Department of Defense to act expeditiously to correct these problems and to report to the committee by December 31, 1990 the corrective and disciplinary actions it has initiated in response to these problems.

PRESERVING LEADERSHIP AND OPERATIONAL SKILLS IN THE OFFICER CORPS AS FORCE LEVELS BUILD DOWN

The committee is concerned, as force levels decline over the next decade, that the Services retain and promote sufficient numbers of men and women who have demonstrated appropriate leadership and operational skills. The committee recognizes that the retention and reward of individuals with technical, administrative, and other skills are also required and that personnel in certain special skill categories will not have equal opportunities to acquire and demonstrate significant levels of leadership and operational skills. Additionally, the committee is unable to specify how much emphasis or what specific percentage of billets should be reserved for those who succeed when they have those opportunities. Nevertheless, the committee believes that unique qualities of leadership and operational skills are required for those individuals who will fill positions involving command, supervision of operational units, or the planning for the utilization of such units.

The committee urges the Secretaries of the Military Departments to ensure that the guidelines for promotion and command selection boards place appropriate emphasis on the selection of individuals with operational experience and skills and demonstrated leadership ability. Experience in combat is also deemed important for those individuals under consideration for the highest levels of command of operational units and should be given appropriate value in the selection process.

The committee believes, moreover, that officers nominated for appointment to positions of importance and responsibility pursuant to section 601 of title 10, United States Code, involving the command or supervision of operational units, should have extensive operational experience and demonstrated potential to lead units in combat or combat likely situations. To this end, the committee intends to inquire into the combat, operational, and leadership backgrounds of officers nominated for appointment to such positions.

TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS

PART A—PAY AND ALLOWANCES

MILITARY PAY RAISE

The committee recommends a provision (sec. 601) that would provide a 3.5 percent pay raise to military personnel effective on January 1, 1991.

The committee notes that the recommended pay raise is less than the expected wage growth in the private sector. However, the committee also notes that the administration recommended the 3.5 percent pay raise in its annual report on the adequacy of pay and allowances of the Armed Forces as ". . . adequate at this time to support our force objectives going into the early 1990s."

The committee looks forward to receipt of the results of the Seventh Quadrennial Review of Military Compensation, especially with regard to a methodology for making annual adjustments to military pay. In the meantime, the committee expects the administration to continue to use the Employment Cost Index (ECI) as a guide for recommending future pay raises for military personnel.

PERMANENT CHANGE OF STATION TRAVEL

The committee recommends a provision (sec. 602) that would authorize funds to be appropriated to the Department of Defense in fiscal year 1991 to fund permanent change of station (PCS) travel. The amount is $200 million less than the Department of Defense requested for fiscal year 1991; however, the committee believes the amount is sufficient given the reduction in accessions, training and other activities that should reduce PCS requirements in fiscal year 1991.

PART B—BONUSES AND SPECIAL AND INCENTIVE PAY

TERMINATION OF SELECTIVE REENLISTMENT BONUS PAYMENTS UNDER CERTAIN CIRCUMSTANCES

The committee recommends a provision (sec. 611) that would authorize the Secretary of Defense to terminate the payment of selective reenlistment bonuses to certain members who do not complete the term of enlistment for which the bonus was paid or who cease to perform in the specialty for which a bonus was paid.

Additionally, as the force is drawn down over the next 5 years, the requirements for enlistment and selective re-enlistment bonuses may diminish. The committee expects that the Department of Defense annual budget submission will reflect such changes in the requirements for enlistment and selective re-enlistment bonuses.

INCREASE IN SPECIAL PAY OF OPTOMETRISTS

The committee recommends a provision (sec. 612) that would increase the special pay for optometrists from $100 per month for each month of active duty to $350 per month for each month of active duty. This increase would become effective on October 1, 1991.

INCENTIVE PAY FOR CERTIFIED NURSE-MIDWIVES AND INTENSIVE CARE NURSES

The committee recommends a provision (sec. 613) that would authorize incentive pay for certified nurse-midwives and intensive care nurses.

SPECIAL PAY FOR PODIATRISTS

The committee recommends a provision (sec. 614) that would authorize special pay for podiatrists.

PART C—TRAVEL AND TRANSPORTATION ALLOWANCES

PAYMENT FOR LABOR IN CONNECTION WITH TRANSPORTATION OF BAGGAGE AND HOUSEHOLD EFFECTS

The committee recommends a provision (sec. 622) that would make permanent the authority provided in the Department of Defense Authorization Act for Fiscal Year 1986, for the payment of certain labor provided by a member of the uniformed services in connection with the transportation of baggage and household effects of the member.

GOVERNMENT TRANSPORTATION FOR CERTAIN MEMBERS ASSIGNED OUTSIDE OF THE UNITED STATES

The committee recommends a provision (sec. 623) that would authorize the Secretary of Defense to prescribe regulations allowing unified combatant commanders to provide government transportation for military and civilian personnel and their dependents in areas outside of the United States when public or private transportation is unsafe or not available.

SHIPMENT OF PERSONAL EFFECTS OF CADETS AND MIDSHIPMEN

The committee recommends a provision (sec. 624) that would authorize a 350 pound weight allowance for the shipment of the personal effects of cadets and midshipmen of the military Service academies. This authority was inadvertently omitted when increased weight allowances were authorized for military personnel in the National Defense Authorization Act for Fiscal Year 1989.

PART D—OTHER BENEFITS

REIMBURSEMENT OF ADOPTION EXPENSES

The committee recommends a provision (sec. 631) that would make permanent the authority to reimburse military personnel for adoption expenses originally authorized as a test program in the

National Defense Authorization Act for Fiscal Years 1988 and 1989.

PART E—READJUSTMENT ASSISTANCE FOR PERSONS INVOLUNTARILY DISCHARGED OR RELEASED FROM ACTIVE DUTY

INVOLUNTARY SEPARATION COMPENSATION AND BENEFITS

The committee recommends a number of provisions that would provide compensation and benefits to military personnel who are involuntarily separated from active duty due to reductions in force over the next 5 years. The committee believes these provisions provide a safety net to personnel who had planned on a career in the military but who may be required to leave active duty before they become eligible to retire.

The committee's recommendations include:

(1) a provision (sec. 641) that would extend the current involuntary separation pay authority for officers to enlisted personnel and remove the $30,000 cap on the formula (10 percent of annual basic pay multiplied by years of service at the time of separation) for calculating involuntary separation pay;

(2) a provision (sec. 642) that would require the Department of Defense to provide to involuntarily separated personnel premium free medical coverage for themselves and their dependents for six months in the program of voluntary medical insurance made available to separating personnel, and to provide medical coverage for pre-existing medical conditions and pregnancy under the Department of Defense health care system for one year;

(3) a provision (sec. 643) that would authorize involuntarily separated personnel to contribute to and become vested in the GI Bill and Veteran's Educational Assistance Program benefits before they separate;

(4) a provision (sec. 644) that would (a) require the Department of Defense to implement a uniform, aggressive program to assist separating military personnel find jobs and settle in the civilian community, and (b) define involuntary separation to ensure that appropriate individuals are covered and that individuals who are involuntarily separated because of disciplinary or qualitative reasons are excluded from certain of these benefits;

(5) a provision (sec. 645) that would authorize separated military personnel the same unemployment compensation entitlement provided to civilians who are unemployed; and

(6) a provision (sec. 621) that would liberalize travel and transportation entitlement rules to permit separating personnel to travel and transportation allowances for actual relocation to any location in the United States or its possessions.

The committee notes that its recommendations were developed with very little input from the Department of Defense. The Department of Defense proposed only an involuntary separation pay provision for the committee to consider. This proposal was delivered on June 20, 1990, minutes prior to a hearing that the Subcommittee on Manpower and Personnel conducted on the need for a comprehensive compensation and benefits package for involuntarily separated personnel.

The committee further notes that it had urged the Department of Defense repeatedly to develop and present a comprehensive package for the committee to consider. The committee is disappointed that the Department of Defense was unable to propose such a package.

Finally, the committee believes that the Department of Defense should consider the earlier vesting of military personnel into the military retirement system along the lines of the Employee Retirement Income Security Act (ERISA). In this regard, the committee recommends that the Seventh Quadrennial Review of Military Compensation that the Department of Defense is organizing consider and make recommendations (to include proposed legislation) on the earlier vesting of military personnel into the military retirement system. In conducting this review, the Seventh Quadrennial Review of Military Compensation should recommend adjustments, if appropriate, to the involuntary compensation and benefits described in this section of the report.

TITLE VII—HEALTH CARE PROVISIONS

OFFICER AND ENLISTED MEDICAL STRENGTHS

The committee recommends a provision (sec. 701) that would prohibit a reduction in the strength of military medical personnel in the active and Selected Reserve below the levels which existed on September 30, 1989, unless the Secretary of Defense certifies that there is no longer a requirement for the number of military medical personnel serving on that date. The committee is concerned that the strengths of military medical personnel remain below wartime requirements and should not be reduced without a clear understanding that the wartime requirements have been reduced and the reason for such reduction.

EXPANSION OF THE AUTHORITY FOR COLLECTION FROM THIRD PARTY PAYERS THE COST OF HEALTH CARE

The committee recommends a provision (sec. 702) that would expand the authority provided under 10 U.S.C. 1095 for the Department of Defense to collect for military hospital care provided to military retirees and dependents with private health insurance, including outpatient care provided to these personnel.

The committee's recommendation is consistent with current authority provided to the Department of Veterans Affairs. The committee expects that its recommendation will enhance health care services in the defense medical system by providing needed additional fiscal resources.

PHYSICIAN REFERRAL AND OVERSIGHT OF SERVICES DELIVERED BY MARRIAGE AND FAMILY THERAPISTS UNDER CHAMPUS

The committee recommends a provision (sec. 703) that would repeal the requirement for physician referral and oversight for psychotherapy services delivered by marriage and family therapists under CHAMPUS, effective October 1, 1991. The committee's recommendation would require the Department of Defense to regulate appropriate certification and credentialing requirements for the provision of such services under CHAMPUS.

UNIFORMED SERVICES TREATMENT FACILITIES

The committee recommends a provision (sec. 704) that would extend the designation of Uniformed Services Treatment Facilities (USTF) as Military Treatment Facilities until December 31, 1994.

The committee makes this recommendation in anticipation of the implementation by the Department of Defense of a managed health care delivery and reimbursement model for the USTF program. The committee expects the Department of Defense to report on this model in fiscal year 1994.

FUNDING OF THE CIVILIAN HEALTH MEDICAL PROGRAM OF THE UNIFORMED SERVICES (CHAMPUS)

The committee is concerned about the chronic underfunding of CHAMPUS by the Department of Defense that has required the reprogramming of funds from other sources over the past 6 fiscal years. For fiscal year 1990 alone, the CHAMPUS funding shortfall is estimated by the Department of Defense to be as high as $740 million.

The committee was dismayed to learn from Department of Defense witnesses at a hearing before the Subcommittee on Manpower and Personnel on May 15, 1990, that the CHAMPUS budget was again underfunded in the amended fiscal year 1991 defense budget request. If CHAMPUS cost trends continue, the fiscal year 1991 CHAMPUS shortfall could approach $1 billion. Defense witnesses were unable to justify this unsatisfactory situation, and further indicated that CHAMPUS funding in the Five Year Defense Program associated with the fiscal year 1991 defense budget request was similarly understated.

The committee directs the Secretary of Defense to correct this unsatisfactory situation and to ensure that future budget requests appropriately reflect a true estimate of the cost of CHAMPUS.

CHAMPUS REFORM INITIATIVE

As authorized by the Congress, the Department of Defense began a demonstration project, the CHAMPUS Reform Initiative (CRI), in August 1988 in an effort to control CHAMPUS costs and provide better care through a system of regional managed care CHAMPUS contracts. The initial phase of the demonstration was limited to California and Hawaii.

Initially, the contractor, Foundation Health Corporation, experienced severe administrative problems involving claims processing and financial management that nearly resulted in the termination of the CRI demonstration. The Subcommittee on Manpower and Personnel reviewed the status of the demonstration project at a hearing on May 15, 1990 with DoD witnesses. At that hearing, DoD witnesses indicated that the problems experienced by the contractor had recently been corrected.

The committee notes that the Department of Defense plans to expand the CRI demonstration into three new States. However, the committee also notes that the General Accounting Office (GAO) has indicated that a decision to expand the CRI demonstration should be delayed until the cost effectiveness of CRI can be evaluated more thoroughly. The committee agrees with the GAO and further believes that the CRI demonstration should be evaluated against other managed care demonstrations, such as the catchment area management system, to determine the relative cost effectiveness of these systems. Therefore, the committee directs the Department of Defense to defer the planned expansion of CRI until the Secretary of Defense can certify to the Committees on Armed Services of the Senate and the House of Representatives that such expansion will be cost effective compared to other managed care programs.

COMPOSITE HEALTH CARE SYSTEM

The Department of Defense has been working over the past 11 years to deploy an automated, computer patient information system to its 767 medical facilities. In 1988, after evaluating composite health care system (CHCS) demonstrations and proposals, DoD awarded a contract to develop, test, deploy and support CHCS. Initially, DoD expected to complete operational test and evaluation (OT&E) at 10 sites by September 1989. However, because of schedule slippages and concerns raised by the General Accounting Office (GAO) about the Defense Department's OT&E plans, DoD expanded the number of sites to 14 and established a new OT&E completion date of August 1990. Because of subsequent problems, DoD reduced the number of test sites to six and established a later OT&E completion date of October 1990.

According to the GAO, the Department of Defense plans show that about 38 percent of CHCS software will not be developed and deployed to the test sites before October 1990. For example, the transfusion services management component, which automates blood test ordering results, entry, documentation, and inventory, will not be available for OT&E.

This situation was reviewed with DoD witnesses at a hearing before the Subcommittee on Manpower and Personnel on May 15, 1990. At that hearing, it became clear that DoD would not be able to complete full OT&E at the six CHCS test sites as planned. In view of this, the committee directs the Secretary of Defense to defer further deployment of CHCS until full OT&E is completed at all six CHCS test sites.

The committee notes that it supports the CHCS effort but wants to ensure that problems with the system are worked out before it is deployed any further.

YEAR 2000 HEALTH OBJECTIVES PLAN

The committee believes that good health and a reduction in preventable death, disease, and disability are fundamental to a productive and economically competitive workforce. Consequently, the committee supports efforts to improve the health and well-being of military personnel and their dependents, particularly through an emphasis on the prevention of health problems and disease.

The committee believes that health promotion and disease prevention have not yet achieved the level of priority within the Department of Defense that they deserve. Therefore, during fiscal years 1992–1993 budget authorization hearings before the Subcommittee on Manpower and Personnel, the committee directs the Assistant Secretary of Defense for Health Affairs to discuss a comprehensive Departmental plan for achieving, by the year 2000, health-related goals consistent with the U.S. Public Health Service's "National Health Objective for the Year 2000," but specific to Department of Defense personnel and their dependents. The committee further expects that the Assistant Secretary will discuss the Department's strategy for promoting the goals, mechanisms for monitoring progress toward the goals, and estimates of the costs associated with achieving the goals.

HEPATITIS B IMMUNIZATION PLAN

The committee is concerned with the escalating incidence of hepatitis B in the United States and throughout the world. In the United States, the Centers for Disease Control (CDC) estimate that 300,000 new infections occur annually. This increase is particularly alarming because hepatitis B, which can result in primary liver cancer, is easily prevented through vaccine. The CDC has developed a comprehensive prevention plan, which includes specific references to the military, and details of other strategies that could be effective in slowing the transmission of hepatitis B among military personnel, their dependents, and civilian employees.

During hearings before the Subcommittee on Manpower and Personnel on the Department's budget authorization requests for fiscal years 1992 and 1993, the committee expects that the Assistant Secretary of Defense for Health Affairs will discuss in detail a departmental plan, which should be consistent with the CDC's recommendations, for prevention of hepatitis B transmission. In addition, the committee expects that this testimony will include estimates of the costs associated with the plan, and will outline reasonable timeframes for implementing the plan.

TITLE VIII—ACQUISITION POLICY AND MANAGEMENT

CRITICAL TECHNOLOGIES PLAN

The committee is deeply disappointed in the Defense Department's inability to provide a comprehensive plan addressing the development of technologies critical to the national defense. The committee believes that the recent dramatic events in Eastern Europe and the Soviet Union only reinforce the need for a comprehensive science and technology policy. The continued inability of the administration to rationalize the national science and technology investment program, and to prioritize technology base activities, detracts both from national security and, in a broader sense, from global economic competitiveness.

The committee recognizes that preparation of the defense Critical Technologies Plan represents a substantial undertaking and commends the Defense Department on its substantial progress over the past 2 years. Nevertheless, the latest plan still lacks many key elements that are essential if this plan is to be of any use in guiding the Department of Defense and the Department of Energy, along with their defense industrial base components, in developing these technologies. For example, the plan describes what has either already been accomplished, or what is currently underway, for each technology. The plan lacks, however, any description of planned future activities or how DoD will organize and use the various resources available to it in developing these technologies. The roles of the DoD in-house laboratories, the DoE national laboratories, American universities and colleges, and U.S. and foreign industry have not been addressed; neither has the potential use of centers of excellence and consortia, with participation by government, academia, and industry organizations. Likewise, areas where international cooperation may provide the best approach to achieving the desired goals have not been addressed. Finally, the committee believes that the plan should better address the dynamic international environment concerning the status and outlook for each technology and not concern itself exclusively with the current status of the United States relative to other nations.

The committee believes that formulation of the defense Critical Technologies Plan should be a Joint endeavor managed by the Department of Defense and the Department of Energy, but with strong participation by the Department of Commerce, NASA and all segments of the U.S. industrial base. The committee further believes it is essential that the U.S. defense industry, through its representative organizations and associations, take a direct role in preparation of the Plan. The committee understands that various defense industry associations were involved in reviewing and commenting on the first two plans forwarded to the Congress. While this level of participation may have been appropriate in these initial efforts, the committee believes that the defense industry must now be more substantially involved and, where feasible, be permitted to prepare detailed development plans supplementing the Plan's strategic outlook.

Certain defense industry organizations, such as the Aerospace Industries Association, already have on-going planning efforts for those technologies that they believe will be critical to the future competitiveness of their industry segment. The technologies identified by industry to-date are consistent with those identified by DoD in its most recent plan. The committee believes that planning for the development of these technologies should be jointly applicable to both DoD and industry. The committee urges the Defense Department to use these efforts, and to encourage similar involvement by other defense industry groups and associations.

The National Defense Authorization Act for Fiscal Years 1990 and 1991 directed that the defense Critical Technologies Plan designate lead organizations responsible for the development of each critical technology. The plan submitted to the Congress contained no lead activity designations for any technology. The committee believes the failure to designate lead agencies is a key element detracting from the usefulness of the Plan. The committee is skeptical that designations of lead activities drawn exclusively from within the Office of the Secretary of Defense are appropriate. In general, the committee believes that the required depth of experience, technical competence, and breadth of contacts within the technology community are more likely to be found in the military Service or Defense Agency technical organizations and laboratories, and that selection of the lead activity should be made by the Director of Defense Research and Engineering from one of these organizations.

The committee believes that one of the major obstacles to effective management of the critical technologies is the Defense Department's inability to rapidly and accurately identify the levels of funding allocated to, or planned for, each critical technology included in the annual Plan. Section 801 directs the Department to include in each annual defense Critical Technologies Plan an identification of all the program elements which support development of one or more critical technologies included within that program element, the allocation of funds to individual technologies within those program elements, and a comparison of these allocations to prior year funding. The committee also looks forward to receiving a report from the Defense Department advising the Congress on its science and technology investment strategy and the Technology Master Plan to assist the Congress in understanding the Department's overall plans for the technology base.

CRITICAL TECHNOLOGIES INSTITUTE

The National Defense Authorization Act for Fiscal Years 1990 and 1991 provides for the establishment of a National Critical Technologies Panel within the Office of Science and Technology Policy (OSTP). This panel is responsible for submitting a biennial report to the President on national critical technologies. Such a report will, however, be of little use if government, industry, and academia do not have a focal point to determine how the findings of the panel should be implemented with either independent or coordinated action to maintain the technological superiority necessary for national security and global economic competitiveness.

The committee fully recognizes that no agency of the Federal Government currently has adequate personnel resources to provide the staff support needed to support the panel's subsequent deliberations and coordination of recommended actions. The committee believes that it is essential that a permanent, highly qualified staff be available if the work of the panel is to have any meaning.

Section 802 would provide for the establishment of a federally funded research and development center (FFRDC) that would provide the required research and analysis support to the OSTP. The proposed legislation provides that this FFRDC, to be known as the Critical Technologies Institute, shall be a nonprofit organization sponsored by the Director of OSTP and intended to support the OSTP, the President's Council of Advisors on Science and Technology (PCAST), and the Federal Coordinating Council on Science, Engineering and Technology (FCCSET) panels dealing with critical technology and industry issues. The Institute shall maintain a continuing insight into the views of industry, academia, and Federal and State government agencies on research and development activities needed for each critical technology identified. The Institute shall use this information to help identify possible national objectives for research, development, and production capabilities and to prepare strategies for achieving these objectives, including assessing the appropriate roles of industry, academia, and government. The Institute shall also publish reports where appropriate discussing its findings and recommendations.

To support the establishment of this Institute, the committee authorizes $5 million for the first year of operation of the Institute. However, it is the committee's expectation that funding for the Institute in following years shall be provided from other appropriations.

DEFENSE MANUFACTURING TECHNOLOGY

The manufacturing technology (MANTECH) programs conducted by the military Services and Defense Agencies continue to provide new, lower cost methods to manufacture many of the critical components used in U.S. weapon systems. The committee considers these programs to be essential for maintaining U.S. leadership in areas of manufacturing critical to the defense of the Nation. The committee notes that many reviews and studies have concluded that manufacturing capabilities in the U.S. have steadily eroded over the past two decades; that the defense industrial base is directly affected by this erosion; and that the U.S. defense industry is becoming steadily more dependent on foreign sources for manufacturing tools, processes, and equipment. The manufacturing technology program conducted by the Department of Defense has already demonstrated a large return on investment in providing advances in manufacturing science and technology. Proper utilization of these advances is vital to the national security interests of the United States.

Despite these demonstrated benefits, there has been a continued failure by the military Services to adequately support the MANTECH program. The Defense Department's amended budget request again proposes MANTECH funding below the level authorized in the National Defense Authorization Act for Fiscal Years 1990 and 1991. The committee believes that the DoD MANTECH program requires stability in funding and provides a total of $175 million to the program for fiscal year 1991.

The continuing reluctance of the military Services to adequately support the MANTECH program, and the need to insure better coordination and integration of these programs, dictates that drastic action be taken. The committee concludes that the only way to produce a more focused program, and to provide the required level of support, is to delete funds from the individual military Service and Defense Agency projects and consolidate them under direction of the Office of the Secretary of Defense (OSD). This action is not intended to eliminate the Service's or Agency's participation in MANTECH, or to preclude their day-to-day management of MANTECH projects. However, the committee does expect that the OSD organization designated to manage the overall DoD MANTECH effort will determine program objectives and funding allocations and will designate a MANTECH lead Service to achieve overall program objectives.

Section 803 directs the Secretary of Defense to provide centralized policy guidance and direction to the Military Departments and Defense Agencies on all matters related to manufacturing technology. A Joint Manufacturing Technology Office is to be established with responsibility for planning and execution of all DoD MANTECH activities other than those specifically delegated to the military Services, Defense Agencies or the SDIO. The committee further directs the Secretary of Defense to prepare a National Defense Manufacturing Technology Plan which will both provide consolidated guidance within the Defense Department and also provide a link with defense industry on its MANTECH programs.

Section 803 also directs the Defense Department, in conjunction with other Federal agencies and departments, to promote research in manufacturing technologies at the Nation's universities and colleges, and to create transfer mechanisms to make the results of this research readily available to U.S. industry.

In establishing its manufacturing technology strategy, the Department should include those elements necessary to ensure that computer integrated manufacturing technologies are fully considered for development. DoD is encouraged to participate in industry-led consortia associated with computer-aided manufacturing and its related aspects, including computer-aided design, numerically controlled machine tools, and robotics. The Department is also urged to establish demonstration programs using facilities and equipment at its in-house laboratories, or to join in an equivalent program already established within a DoE defense national laboratory. The Department may choose to use existing facilities, or to create dedicated facilities in its laboratories or at DoE defense laboratories to support transfer of technology developed at those installations to industry, especially at the subtier levels. DoD should also continue to participate in programs intended to enhance the application of computer automation, interactive data bases, and standardized product data exchange specifications to defense manufacturing capabilities, and to cooperate fully with the DoE defense national laboratories in those areas where those laboratories have a demonstrated technical excellence, such as in ultra-precision measurement and manufacturing technology and in environmentally sound manufacturing techniques.

The committee believes that it is also necessary that the Department's manufacturing technology strategy include elements leading to an integrated product development process with emphasis in the concurrent engineering of the product and the process by which it will be manufactured. The Department should encourage and facilitate contractor implementation of concurrent engineering practices and their enabling technologies, and should support education and training of government and industry personnel in applying concurrent engineering practices to weapons system acquisition.

Working in conjunction with other Federal departments and agencies, the Secretary of Defense is directed to support upgrading the capabilities of subtier defense industry suppliers by working with existing programs to disseminate manufacturing technology know-how and practices to these lower tier firms. Using this authority, DoD may negotiate matching-fund grants, contracts, or other agreements with existing manufacturing extension programs for the purpose of disseminating manufacturing technology and upgrading defense production practices. It may also fund and evaluate competitively chosen pilot projects through these manufacturing extension services and any other existing organizations already chartered to help smaller manufacturers.

In that regard, the committee believes that the Regional Experiment on Small and Medium Size Companies, now performed by the Air Force MANTECH office, has nationwide applicability and directs that the Secretary of Defense continue to support this activity.

The committee continues to support the Navy's Center of Excellence in Composites Manufacturing Technology and directs that of the funds provided for manufacturing technology, not more than $5 million be provided to support this effort. The committee also recommends that of the amount provided for manufacturing technology, $2.9 million be used to continue support of a Center of Excellence for Advanced Flexible Manufacturing Systems, and that an additional $5 million be used to support the National Center for Manufacturing Sciences.

The committee also notes that in many instances manufacturing in the defense sector could benefit greatly from advances already made by commercial manufacturers. One way in which this can occur is through cooperative research and development agreements executed among DoD and DoE laboratories, commercial manufacturers, and defense manufacturers, as authorized in section 3131 of the National Defense Authorization Act for Fiscal Years 1990 and 1991. These provisions provide for technology transfer not only from government-to-industry, but from industry-to-government. The committee directs the Defense Department and the Energy Department to make immediate and widespread use of these provisions, especially with respect to manufacturing technology and processes

The committee is also concerned that the positive results achieved in finding ways to reduce manufacturing cost and increase production efficiency through the MANTECH program are not being effectively incorporated into the weapons acquisition process. The committee directs that the Secretary of Defense investigate means to enhance this transition, including better use of the Industrial Modernization Incentives Program (IMIP) and the Small Business Innovative Research (SBIR) program.

ADVANCED MATERIALS PROCESSING PARTNERSHIPS

Two recent studies by the National Academy of Sciences (NAS) and the Office of Technology Assessment (OTA) concluded that materials science and technology are crucial to industries important to the United States. These studies both note that the United States' major trading partners, including Japan and West Germany, have targeted materials science and engineering as growth areas and are developing a strong competence in this field. In the United States, industry, universities, and government laboratories have the technical strength to mount major efforts and exploit breakthroughs in the field. More research and development effort is required, however, particularly in developing fabrication processes applicable to low-cost advanced materials.

The committee agrees that advanced materials technology will be a determining factor in the U.S. ability to maintain technological superiority in national defense and global competitiveness, and is particularly concerned about the security implications of the United States becoming overly dependent on foreign sources for both advanced materials technology and manufacturing processes.

The committee supports integrated research and development efforts in advanced materials synthesis and processing, structure and composition, and manufacturing processes. Further, the committee believes that it is in the national interest for Department of Defense and Department of Energy defense laboratories to cooperate with industry and academia to achieve this capability.

Under the authority granted by the Stevenson-Wydler Technology Innovation Act of 1980, as amended by section 3133 of the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Secretary of Defense and the Secretary of Energy are directed to establish at least one advanced materials processing partnership each with a private sector firm, non-profit organization, university, college, or some combination thereof, to conduct research and development activities towards development of high-quality, low-cost fabrication processes. In these arrangements, each participant is expected to contribute a "fair share" of the overall cost, where "fair share" contributions may be financial, equipment, services, materials, or other assets. The arrangements establishing the partnerships should also provide for transfer of the technology developed to the defense industrial base with adequate consideration given to protection of intellectual rights.

The committee recommends that of the funds provided in title II of this bill for basic research, exploratory development, and advanced technology in advanced materials, $5 million be made available for government, industry, and academia partnership projects as described in this section.

The committee also recognizes the critical importance of advanced ceramic materials in maintaining the Nation's technological superiority. The ceramic insertion program is designed to qualify advanced ceramic components in current military systems. This program will generate the quality and performance data necessary to speed broad scale adoption of this technology by the Armed Forces. The committee recommends that of the funds provided in title II of the bill for basic research, exploratory development, and advanced technology in materials science and technology, $5 million be made available to support the ceramic insertion program.

SMALL BUSINESS PARTNERSHIP MODEL PROGRAMS

Some of the most successful partnerships between small businesses and the national defense laboratories have been organized with the assistance of State or local government-sponsored, nonprofit, intermediaries, including business development centers, technology development centers, and community colleges. The national defense laboratories, with limited technology transfer resources, can use the assistance of such intermediaries to locate small businesses with technology needs. Likewise, small businesses can use assistance in understanding what the laboratories might offer. This interaction of laboratories, intermediaries, and small businesses can form a network through which mutually beneficial technology partnerships can be established. To date, there have been relatively few such partnerships established and those that have been established have received little attention in the federal technology transfer community.

Section 5122 of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 3704(a)) amended the Stevenson-Wydler Technology Innovation Act and established a Clearinghouse for State and Local Initiatives on Productivity, Technology, and Innovation. This Clearinghouse is authorized to provide assistance to State and local governments; to study ways in which Federal agencies can assist State and local governments to enhance the competitiveness of American businesses; to advise State and local governments on the most effective programs; and to make periodic recommendations to Federal agencies concerning ways to improve their assistance.

Section 804 requires the Secretary of Defense and the Secretary of Energy to assist the Secretary of Commerce in developing model programs of cooperation among small businesses, State and local government-sponsored partnership intermediaries, and national defense laboratories. The section also directs the Department of Defense and the Department of Energy to issue necessary regulations to implement this section. The Secretary of Commerce is required to include a description and evaluation of these programs, and the relationships developed, in the Department's triennial report to Congress on State and local initiatives to enhance competitiveness. The description should, at a minimum: (a) review and summarize the status and progress of the programs developed; (b) describe the economic and technical significance of such programs, especially as they affect the prospects for growth for small businesses; (c) identify any legal, policy, or other barriers to effective cooperation among the national defense laboratories, partnership intermediaries, and small businesses; and (d) recommend whether these model programs should be more widely adopted and if any other statutory, regulatory, or policy changes should be made to further facilitate implementation of the small business preference provisions of the Stevenson-Wydler Act.

Under the authority granted, the committee expects that the model programs developed will include partnerships where the national defense laboratories, as a result of their work with partnership intermediaries will: (a) provide small businesses with names, locations, and telephone numbers of people, including laboratory employees, who are knowledgeable in technologies which may be productively used by small businesses; (b) arrange for meetings with laboratory employees; (c) provide access to non-classified work in progress or completed at the laboratory; (d) coordinate use of laboratory facilities and equipment, including software, hardware, processing technologies, and instruments; (e) assist in obtaining licenses to patents and other intellectual property rights; and (f) extend production engineering and manufacturing extension services. The laboratories may also enter into cooperative research and development agreements, and engage in personnel exchanges with small businesses, including conducting workshops, conferences, and similar meetings in cooperation with partnership intermediaries.

INDEPENDENT RESEARCH AND DEVELOPMENT ENHANCEMENT

The committee believes that the defense acquisition reforms now underway must encourage defense executives in government and industry to take a long-term view of the national defense, particularly the defense technology base. These reforms should include steps to encourage defense industry to make investments in research and development that benefit both near- and long-term technology. It should encourage breaking down the barriers between civilian and military production and thereby stimulate research and development that benefits both sectors.

Independent research and development (IRAD) programs, undertaken by industry under joint funding agreements with the Department of Defense, offer great promise for diffusing new technology into dual-use applications. The committee understands that, as presently structured under statute and regulation, the defense industry primarily undertakes IRAD projects that are predominately of a military nature. The committee believes that, in today's climate of decreasing defense budgets, increasing international technological competition, and an urgent need to efficiently adjust the Nation's defense industrial base, defense contractors should be encouraged to use IRAD projects to support Defense Department objectives in the broadest sense.

Section 805 amends chapter 139 of title 10, United States Code, to direct the Secretary of Defense to prescribe new regulations for payment of independent research and development and bid and proposal costs. Payment for such costs is authorized for any work that is of potential interest to the Department, including IRAD projects that strengthen the defense industrial and technology base, that enhance the Nation's industrial competitiveness, that promote development of critical technologies as identified in the Department's Critical Technologies Plan, that support development of dual-use technologies, and that support research and development projects addressing environmental concerns.

DEFENSE INDUSTRIAL BASE

The committee is concerned that the ongoing cuts in defense spending and procurement may lead to a major contraction of the defense industrial base, and the loss of the U.S. lead in critical military technologies. While some major contractions of the defense industrial base are inevitable, and the Department of Defense must plan to make added use of civilian or dual-use technologies, the United States must not allow its defense industrial base to collapse to the point where critical capabilities are lost, where the United States cannot expand defense production in a crisis, and where the United States cannot support its research and development activities with the requisite manufacturing facilities and skills.

The committee is particularly concerned that there be a full analysis of the impact of the Department of Defense's procurement plans and actions on the defense industrial base; that the Department monitor the impact of its major procurements and programs on the defense industrial base; that procurement rates be set with consideration of the defense industrial base as well as the need to reduce costs; and that the Department analyze the impact of competitive procurement, facilitization requirements, program terminations, and efforts to expand the acquisition of commercial technology on the defense industrial base.

Section 806 amends section 842 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 to require the Defense Department to report annually on the defense industrial base. The report's contents are expanded to include an assessment of U.S. business' financial ability to maintain viable production bases in areas where major program terminations have occurred or are planned, and an assessment of the Nation's ability to expand the base in those areas in times of crisis. The report also must now consider the impact of having existing U.S. defense contractors use commercial technology and equipment and of the defense industrial base's dependence on foreign or foreign-owned suppliers.

DEFENSE CRITICAL INDUSTRIES PLAN

Section 842 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 directed the Department of Defense Industrial Base Assessment office to analyze the condition of the defense industrial base, including its financial health, trends in profitability, levels of capital investment, spending on research and development, and debt burden. The Department was also directed to analyze the consequences of mergers, acquisitions, and takeovers.

The committee is aware that the Department of Commerce has successfully conducted financial and capabilities assessments of numerous industries and technologies vital to the defense industrial base. Data has been collected and provided to DoD supporting its study of the precision gear and gas turbine engine industries, as well as the Navy Department's foreign dependency study of three critical weapon systems. The Department of Commerce also recently comprehensively surveyed the robotics and semiconductor manufacturing equipment industries.

The committee is pleased with the breadth and depth of the report on emerging technologies prepared by the Technology Administration of the Department of Commerce and believes that this report can be a useful resource in the preparation of the industrial assessment required by section 842 of the National Defense Authorization Act for Fiscal Years 1990 and 1991. The committee therefore directs that the Department of Defense obtain the Department of Commerce's support in preparing the report required by section 842.

MULTIYEAR CONTRACTING ENHANCEMENT

Multiyear contracting, when used properly, can benefit the acquisition system greatly by promoting program stability and reducing unit costs. Multiyear contracting also entails a risk of substantial losses, as compared to annual contracts, if a program is reduced or terminated. Moreover, excessive use of multiyear contracting can reduce the Government's flexibility to fund other programs in the event of significant changes in the threat or technology.

Under current law, multiyear candidates must demonstrate a 10 percent savings over the cost of annual contracts. The Department of Defense has proposed that the rigid 10 percent requirement be replaced by a requirement that multiyear candidates demonstrate "substantial savings of the total anticipated costs of carrying out the program through annual contracts." This proposal received broad support from government and industry witnesses during the committee's hearings, and is included in section 811 of the bill. The committee also provided DoD the authority to use multiyear contracts for military construction and automated data processing equipment. The committee will continue to review multiyear candidates carefully to ensure that the multiyear authority is reserved for strong candidate programs for which there will be a stable requirement during the projected reduction in funding for defense programs.

ACQUISITION OF COMMERCIAL PRODUCTS

In section 824 of the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Congress established a major initiative to streamline the acquisition system by enhancing the Department's ability to procure "off-the-shelf" items. Key features included development of a simplified uniform contract for the acquisition of commercial items, elimination of unnecessary contractual clauses, development of a commercial products inspection clause, and minimization of requirements for submission of certified cost and pricing data.

The Defense Department has proposed additional authority to waive virtually all statutes governing the acquisition process for the purpose of developing "commercial style acquisition procedures." The Department has provided few details as to the anticipated content of these procedures.

During the committee's hearings, substantial questions were raised by a diverse group of witnesses from industry, the bar, and the General Accounting Office about the wisdom of providing virtually unlimited authority to waive the laws designed to promote efficiency, economy, integrity, and fairness in the acquisition process. Many witnesses expressed approval of the concept of a streamlined commercial acquisition process, but were opposed to waiving the basic acquisition laws without a clear understanding of what procedures would be used in place of current fundamental requirements. As Mr. David Packard noted in a letter to the committee:

> [The proposal] does not address the real reforms which are needed to make commercial product acquisition better. Rather than actually advancing the important concepts of paperwork reduction, real market research, quality buying, market acceptability, or other critically needed changes to the culture of the procurement process, it seems to be directed to achieve some other policy agenda. The fact is that current law allows, even encourages, government to buy smart today, but the system does not optimize the use of these policies. Therefore, what is really needed is a cultural change which implements the tools already at the government's disposal, but this requires the will to do it.

The committee agrees that there is a need to implement last year's amendments before granting unbridled discretion to waive all current laws. The committee recognizes that there is merit to the general concept of simplifying the rules and statutes applicable to commercial products acquisition, so long as it is approached in a careful, structured manner.

Section 812 builds upon last year's amendments to provide the Department with additional flexibility to develop regulations for the acquisition of commercial products. This provision would: (1) require DoD to prescribe streamlined procedures for the acquisition of commercial products; (2) codify the initiatives authorized in last year's legislation; (3) make it clear that when the General Services Administration issues a certificate of established catalog price that is current for a product, the contractor does not have to submit additional documentation to qualify for the commercial products exception to the certified cost and pricing data requirement; (4) authorize DoD to conduct commercial products solicitations in which offerors would be required to demonstrate the commercial nature of their products; and (5) establish a test program in which the Department would examine the utility and fairness of two concepts proposed by the Department as part of the Defense Management Report legislative package—use of commercial bidders lists and authority to award contracts based upon factors other than cost without discussions with the offerors.

UNIFORM SMALL PURCHASE THRESHOLD FOR VARIOUS REQUIREMENTS APPLICABLE TO GOVERNMENT CONTRACTORS

In 1949, Congress authorized simplified procurement procedures for purchases under $1,000. The purpose of this small purchase threshold was two-fold: first, to enable the government to promptly procure routine items with the minimum requirements needed to preserve financial integrity; and second, to make it possible for small businesses, particularly those that cannot reasonably afford the overhead necessary to complete the government's paperwork requirements, to compete for government business.

Over the years, the threshold has been raised to its current $25,000 level. The benefits of the small purchase threshold, however, have not been fully realized because there are a variety of other statutes which have thresholds below the $25,000 level, some as low as $2,500. The varying levels not only create administrative problems for the government, but can discourage commercial firms that are not currently involved in government procurement from competing for government business.

The Department of Defense has proposed that Congress establish a uniform threshold at $25,000, the level of the current small purchase threshold in the Competition in Contracting Act. Section 813 of the bill would amend current law to establish this threshold with respect to certain requirements applicable to government contractors under the Office of Federal Procurement Policy Act, the Small Business Act, the Rehabilitation Act of 1973, and the Solid Waste Disposal Act of 1976. Under the committee's proposal, this threshold would remain stable until 1995, and would be subject to an adjustment for inflation at that point and every 5 years thereafter. Although this provision would not cover all such thresholds, it is an important first step. The committee will continue to work with other Senate committees to expand the coverage of the uniform threshold to similar statutes.

FEDERAL ACQUISITION REGULATORY COUNCIL MEMBERSHIP

In 1988, Congress established the Federal Acquisition Regulatory Council, consisting of the Secretary of Defense and the Administrators of NASA, the General Services Administration, and the Office of Federal Procurement Policy, to assist in the coordination of government-wide procurement policy. Under current law, the Secretary may delegate responsibility to sit on the Council to the Under Secretary of Defense for Acquisition, but not to any subordinate official. The administration has proposed authorizing further delegation of this responsibility to an Assistant Secretary of Defense. Within the Department of Defense, the Assistant Secretary of Defense for Production and Logistics has direct supervisory responsibility over the defense acquisition regulatory process, and would serve as an appropriate representative of the Department of Defense on the Council. Section 814 of the bill would authorize the Assistant Secretary to represent the Department on the Council.

COMPETITIVE ALTERNATIVE SOURCE REQUIREMENT

Current law, 10 U.S.C. 2438, presumes that dual sourcing is appropriate for most major systems and subsystems and requires detailed justifications and a report to the Congress when dual sourcing is not considered appropriate. The committee received testimony from the DoD Inspector General noting that dual sourcing does not necessarily ensure full price competition because of the knowledge among the contractors that the award would be split. The Inspector General observed that while dual sourcing can be beneficial, it is not such a preferred procurement technique as to require a detailed report when it is not used. The Department of Defense has proposed amending current law to eliminate the reporting requirement and establish criteria for consideration of dual sourcing on a case-by-case basis. The Department's proposal is timely, because opportunities for dual sourcing are likely to diminish considerably in light of changes in the military threat, anticipated reductions in defense spending, and the likelihood that systems will be procured in reduced quantities and over a longer period of time. Section 815 would adopt the DoD proposal with minor modifications.

CONTRACT AWARDS WITHOUT DISCUSSIONS

Under the Competition in Contracting Act, 10 U.S.C. 2305(b)(4), a contract may not be awarded solely on the basis of initial proposals in a negotiated competitive procurement unless "acceptance of an initial proposal without discussions would result in the lowest overall cost to the United States." The Department of Defense has proposed permitting awards without discussions to other than the lowest priced offeror when another offer would be to the "greatest benefit" to the Government. Although the Department would continue to hold discussions in most circumstances, DoD believes that its proposal would permit a greater emphasis on quality factors, and would expedite the acquisition process by eliminating unnecessary discussions.

Witnesses at the committee's hearings from both industry and the General Accounting Office opposed the proposal on the grounds that the Department had not demonstrated that the requirement for discussions was detrimental to the Government's interests and that the proposed standard was too subjective. During the hearings, it became clear that a significant part of the problem stems from the lack of general agreement as to whether the authority to award without discussions is limited to the lowest priced offer, or whether such awards can be based on all cost and cost-related factors.

Section 816 would make it clear that awards without discussions are permissible when based upon the lowest costs, including life-cycle costs. The Secretary of Defense would be required to prescribe guidance to authorize consideration of life-cycle costs as a factor in determining the lowest overall cost with respect to awards without discussions.

In its report accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee requested the Under Secretary for Defense for Acquisition to conduct a study of various Service initiatives emphasizing quality and other non-cost related factors in the award process and to assess the appropriateness of expanding the use of these initiatives throughout DoD. This study has not been completed. In the meantime, section 812 would authorize a limited test of awards without discussions in the acquisition of commercial products. The committee believes that the study requested in last year's committee report should be received, the amendment in section 816 should be implemented and evaluated, and the test program in section 812 should be assessed before additional changes to the discussions requirement are considered.

CERTIFIED COST OR PRICING DATA THRESHOLD

Contractors must provide the Department of Defense with certified cost or pricing data for all contracts, modifications, and subcontracts in excess of $100,000, except when the price agreed upon is based on adequate price competition, established catalog or market prices of commercial products, or law or regulation. The contractor must certify that the data is "accurate, complete, and current."

The Department and industry witnesses testified in the committee's hearings that the administrative requirements associated with the collection and certification of cost and pricing data, which are unique to the Government procurement process, discourage many small and mid-sized firms from participating in defense procurement. The Department of Defense has proposed raising the threshold from $100,000 to $500,000 in order to expand the number of firms competing for defense contracts.

Section 817(a)(1) would increase the threshold to $500,000. Contracting officers would retain full authority to request cost and pricing data below the threshold when, in their judgment, such data is necessary to assess price reasonableness. In view of concerns expressed by the Inspector General and the General Accounting Office about the potential for defective pricing below the $500,000 threshold, the Secretary of Defense should issue appropriate guidance to identify the type of high-risk procurements in which contracting officers should exercise the residual right to require the submission of certified cost and pricing data. In addition, the committee has included a requirement that the Secretary of Defense prescribe regulations to ensure that contracting officers are provided with the information needed to ensure that prices are fair and reasonable. This is not a certification requirement, and the information requirement should be structured in a manner that does not require firms that do not otherwise have government-unique accounting or cost-estimating systems to establish such systems. Commercial firms should not be required to make available any element underlying the cost of a commercial product except as otherwise authorized by law. In general, the information requirements in such regulations should be structured in a manner consistent with the goal of increasing participation in the defense industrial base.

Under a related provision of current law (10 U.S.C. 2323), contractors must certify that the Government is receiving the lowest commercial price for spare and repair parts. The Inspector General of the Department of Defense has concluded that the current certification procedure is not cost-effective, and the Department has recommended repeal of the certification. Section 817(a)(2) would repeal this provision in view of section 817(a)(1) which would require the Department to develop guidelines on the disclosure of appropriate price data when the expected price is below the $500,000 threshold.

PILOT PROGRAM FOR MAJOR DEFENSE ACQUISITION PROGRAMS

The Department of Defense requested authority to establish a pilot program for up to six major defense programs to test methods to exempt these programs from virtually all statutory requirements, including those applicable to price, cost, schedule, performance, management, oversight, warranties, and socioeconomic requirements of law.

Although most witnesses at the committee's hearings favored testing innovative acquisition procedures, there was considerable skepticism expressed about the broad waiver authority in the proposal. The Public Contract Law Section of the American Bar Association, while emphasizing the need for streamlining, noted that "simply removing existing procurement procedures will not magically solve the problem." They added that "many provisions of Federal law . . . are essential for the protection of the Government's interest in procurement of goods and services and should not be waived."

Mr. David Packard, in a letter to the committee, said "legislation should not focus on . . . arbitrarily sweeping aside all basic statutory checks and balances of the system." The Aerospace Industry Association noted the importance of structuring the pilot program concept in a manner that would "satisfy congressional oversight prerogatives, grant the flexibility that the DoD seeks, and create a more functional system without jeopardizing the taxpayer's interest."

At the hearings, several members expressed skepticism about the broad waiver authority and suggested that a detailed justification would be needed before any such program would be approved.

In a post-hearing question, the committee specifically asked the DoD to identify the statutes that would be waived under the program and to provide a rationale for the waiver request. Despite this request, no specific statutes have been identified by the Department.

The committee is disappointed by the Department's failure to identify specific statutes which have been impediments to the procurement process, to identify the problems with these statutes, or to propose specific solutions.

Although the committee agrees that a carefully structured pilot program has the potential for developing improvements in the acquisition process, the committee does not agree that a blanket waiver of all statutes without any congressional oversight is necessary or appropriate. If the Department believes that specific statutes inhibit innovative acquisition concepts, it should be prepared to explain the difficulties with current law, provide examples, and indicate how the statutes should be modified to correct these problems.

Many statutory provisions, including the Competition in Contracting Act, the Truth in Negotiations Act, and statutes establishing accounting and financial controls and warranty and testing requirements, contain vital safeguards which are in the interest of the U.S. Government and the taxpayer. The committee does not believe that the case has yet been made for waiving any of these statutes.

Section 818 would authorize the Department of Defense to select up to six major acquisition programs to be designated as pilot programs. For each program, the Secretary will have authority to supersede procurement laws in the conduct of approved pilot programs.

However, a pilot program may be so designated only after specific statutory authorization by Congress. The Department is required to notify Congress of each program nominated for such a designation. Each such notification must include a specific list of the statutes to be waived, the impediments that these statutes have caused, and the mechanisms to be substituted for these statutes to protect the Government's interests.

The Department is required to provide a specific rationale for waiving each statute it proposes to waive at the time it nominates a major defense acquisition program for a pilot program designation. The committee will not authorize any program to be designated as a pilot program, and will not authorize the waiver of any statutory provision, without adequate justification.

ADVISORY PANEL ON STREAMLINING AND CODIFICATION OF THE ACQUISITION LAWS

Secretary Cheney's Defense Management Report recommended that Congress act to consolidate and simplify the acquisition laws. Section 819 would implement this recommendation by establishing an Advisory Panel on Streamlining and Codification of the Acquisition Laws.

Since the end of World War II, there have been numerous studies of the acquisition system by Government agencies and commissions. The Packard Commission and Secretary Cheney's Defense Management Report represent the most recent efforts to promote efficiency in Government procurement practices. The purpose of this Advisory Panel will not be to plow the same ground as previous studies; rather, it will be to take the general principles set forth in these studies and prepare a pragmatic, workable set of recommended changes to the acquisition laws.

The goal of the Advisory Panel will be to develop a statutory proposal and supporting documentation for consideration by the Congress. The Advisory Panel should produce a report in two parts. The first part will list each current acquisition law, accompanied by: (1) a legislative history that describes the purpose of the original provision and any subsequent amendments; (2) a description of the role of the law in current acquisition practices (both statutory and regulatory); and (3) a recommendation as to whether the law should be retained, repealed, or modified. The second part of the report will consist of a statutory proposal and sectional analysis.

The Advisory Panel should seek to limit statutory provisions to those necessary to structure buyer-seller relations in the context of Government procurement, ensure the financial and ethical integrity of Government programs, and protect other fundamental governmental policies. When considering whether a particular statute should be retained, repealed, or modified, the Advisory Panel should consider: (1) whether the statutory purpose remains valid in light of subsequent changes in the acquisition system; (2) if so, whether the wording of the statute should be changed to reflect subsequent developments; (3) whether detailed requirements should be replaced by broad statutory guidance.

The report will be due not later than December I5, 1992. This should provide a sufficient period of time for development of the report and consideration by the Congress.

The Advisory Panel will consist of 18 members, 8 to be appointed by the President Pro Tempore of the Senate upon joint recommendation of the Majority and Minority Leaders of the Senate, 8 to be appointed jointly by the Speaker of the House of Representatives and Minority Leader of the House of Representatives. The Secretary of Defense and the Administrator of the Office of Federal Procurement Policy would be members of the Panel.

Persons appointed to the Advisory Panel should be experts in acquisition law who can devote a substantial amount of time to this drafting effort. The Advisory Panel should not operate as a board that directs the work of a staff; rather, the primary work should be done by the members of the Panel, with staff serving to provide administrative support and routine research assistance. The Advisory Panel will be located in the legislative branch of Government, but will receive administrative support from the Department of Defense.

OVERSEAS SEVERANCE PAY

Under current law, the costs of severance pay to foreign nationals employed by DoD service contractors outside the United States are unallowable to the extent that such costs "exceed the amount in the industry involved under the customary or prevailing practice for firms in that industry performing similar services in the United States." The Department of Defense has reported that this provision unfairly penalizes firms that have implemented severance pay requirements in compliance with the laws of the host nation. Section 820 would provide a limited exception to the general prohibition in circumstances in which a similarly situated business in the host nation would be required to make the same payment. Under the committee's recommendation, the exception could be applied to allow payments required by the law of the host nation only when all three of the following conditions are met: (1) the law of the host nation is generally applicable to a significant number of businesses in the commercial sector of the host nation; (2) the law was in effect at the time the contract for services was entered into; and (3) the Secretary of Defense determines that such payments are in the best interests of the United States.

EVALUATION OF CONTRACTS FOR PROFESSIONAL AND TECHNICAL SERVICES

Section 804 of the National Defense Authorization Act for 1989 directed the Department of Defense to establish a Government-industry advisory committee to recommend criteria for the evaluation of bids for professional and technical services that would not encourage the use of mandatory uncompensated overtime. This reflected concern that proposals based on uncompensated overtime could reflect unrealistic or unreasonable labor rates, leading to improper evaluation of bids and a deterioration in the value of services provided to the Government.

The advisory committee report, which was issued on March 29, 1990, recommended a number of policy changes to discourage uncompensated overtime, but it did not reach a consensus on whether bids should be evaluated on the basis of a 40-hour week.

The committee's review of this matter makes it clear there is considerable potential for reducing uncompensated overtime by encouraging the acquisition of services on the basis of services to be performed rather than on a time and materials basis. Accordingly, there are two major actions that need to be undertaken before the Congress considers mandating rigid statutory accounting practices. First, there is a need to strengthen the Department's guidance and oversight on the acquisition of professional and technical services to ensure that, to the maximum extent practicable, professional and technical services are acquired on the basis of the task to be performed rather than on the basis of the number of hours of services provided. The committee also believes that guidelines need to be developed to define and evaluate what activities constitute "work" in excess of a 40-hour week when such hours are used to determine labor rates in proposals for the provision of professional and technical services. Section 821 would require the Secretary of Defense to prescribe regulations to address these concerns. Second, there is a need to promote use of the master agreement program provided by the Congress last year to simplify the acquisition of professional and technical services. Section 821 would also provide the Secretary with sufficient authority to use the master agreement program in order to diminish the potential for submission of bids based upon uncompensated overtime.

THE ACQUISITION WORKFORCE

In 1986, the Packard Commission described the DoD acquisition workforce as "undertrained, underpaid, and inexperienced." The Commission emphasized the direct relationship between personnel reform and acquisition reform by noting: "Whatever other changes may be made, it is vitally important to enhance the quality of the defense acquisition workforce—both by attracting qualified new personnel and by improving the training and motivation of current personnel."

Last year, the National Commission on the Public Service (the "Volcker Commission") echoed these concerns in a stark assessment of the state of public service: "Too many of our most talented public servants—those with the skills and dedication that are the hallmarks of an effective career service—are ready to leave. Too few of our brightest young people—those with the imagination and energy that are essential to the future—are willing to join."

In an effort to address these issues, the Senate last year included a number of personnel management initiatives in the National Defense Authorization Act for Fiscal Years 1990 and 1991. As noted in the statement of managers (H. Rept. 101-331): "The conferees agree that there is an urgent need to address the crisis in public service and to promptly enact remedial legislation." At the request of the House members, the conferees "reluctantly" agreed to defer action in order to explore the potential for a government-wide solution, but noted "that the problems facing the public service are simply too critical to await the development of a solution that will address every conceivable problem and interest—and that . . . prompt and vigorous action by the administration and Congress must be taken in the next few months to enact the necessary legislation."

As the 101st Congress draws to a close, a consensus on a Government-wide approach is no closer in sight. Although the committee will continue to work with those seeking a Government-wide solution, there are a number of discrete actions which can be applied to meet the personnel management needs of the Department of Defense and the national security programs of the Department of Energy without adversely affecting the prospects for broader reform. These changes, many of which were recommended by the administration as part of the Defense Management Report, are included in part C of title VIII of the bill.

MANAGEMENT OF THE ACQUISITION WORKFORCE

Section 831 would require the Secretary of Defense to: (1) assign responsibility within the Office of the Secretary of Defense for issuance of acquisition workforce policy; (2) prescribe criteria for determining whether acquisition positions should be filled by military or civilian personnel; and (3) establish standards and procedures for the recruitment, training, education, advancement, and compensation of the acquisition workforce.

The committee is concerned that the actions taken thus far under the Defense Management Report, particularly those concerning the concept of an "acquisition corps," have not reflected the necessary degree of supervision and direction from the Office of the Secretary of Defense. Each Service appears to be developing unique standards, without discernible rationale, for entry into, and advancement through, the acquisition corps. Insufficient attention has been paid to the differences between the management systems applicable to military and civilian personnel, and to the acquisition workforce needs of the Defense Agencies. The committee is particularly concerned that the acquisition corps concept being developed by DoD focuses almost exclusively on the management of major systems acquisitions. The Department has been plagued in recent years by serious problems in the area of spare parts and inventory management. In developing the regulations required by this section, the Secretary must ensure that the acquisition corps concept applies to all elements of the acquisition workforce, not just those being groomed for management of major systems acquisition.

ACQUISITION WORKFORCE ENHANCEMENTS

Section 832(a) would implement Secretary Cheney's Defense Management Report recommendation to provide the same relocation benefits to employees transferring to Alaska and Hawaii as are provided to employees transferring to other States.

Section 832(b) would enhance the Government's ability to attract and retain former military and civil service personnel who face a substantial reduction of retired pay if they reenter Government service. The current forfeiture requirement penalizes continued Government service by skilled and experienced personnel. As the Deputy Inspector General of DoD has noted: "It makes little sense to encourage a brain drain from the Government by forcing retired military personnel with badly needed skills to become contractors/consultants instead of civil servants." The administration has recommended that waiver of the penalty be authorized on a case-by-case basis. The bill would take an important step in that direction by authorizing the Secretaries of Defense and Energy, with the concurrence of the Director of the Office of Personnel Management, to waive the current penalty on continued service by former military and civilian personnel for up to 1,000 positions in the Department of Defense and up to 250 positions in the Department of Energy national security programs, on a case-by-case basis.

Section 832(c) would implement a Defense Management Report recommendation to authorize transportation of dependents, remains, and effects in the event that the employee dies while in an assignment in Alaska or Hawaii or under a mandatory mobility agreement.

Section 832(d) would address one of the most significant training and education issues concerning the acquisition workforce—the need to provide current employees with the ability to obtain an educational degree necessary to qualify for a more advanced position. This provision implements a Defense Management Report recommendation by establishing a 3-year test program authorizing DoD to pay for an employee's educational expenses when there is a current or anticipated shortage of qualified personnel and the educational program will lead to a degree that will qualify the employee for a more advanced position in the career service.

Section 832(e) would implement a Defense Management Report recommendation to exclude temporary hires (serving on less than 1-year appointments) from the formal performance appraisal process in order to reduce unnecessary personnel paperwork.

Section 832(f) would implement a Defense Management Report recommendation to repeal the general prohibition upon hiring retired military personnel within 180 days of retirement. This waiting period produces unnecessary delays and paperwork in hiring necessary personnel.

Section 832(g) would enhance the Government's ability to hire and retain employees at remote worksites by implementing a Defense Management Report recommendation to provide the President with authority to adjust the remote worksite allowance, which is currently capped at $10 per day.

Section 832(h) would establish a loan forgiveness test program for students with degrees in scientific, engineering, and professional skills. In addition to low pay, the substantial debt that many of today's students carry from their student loans—particularly those with professional and other advanced degrees—acts as a disincentive to Government service. This section would allow DoD to conduct a 3-year test of the utility of obtaining commitments for Government service as part of a loan repayment agreement. Not more than 500 such agreements could be made in any one year. The program would require a minimum of 3 years of service, and the maximum forgiveness would be $6,000 per year and a total of $40,000.

Section 832(i), which implements a Defense Management Report recommendation, would clarify current law to include assignment to Panama as an assignment for which a separate maintenance allowance is authorized when it is necessary to maintain the employee's spouse or dependents at a separate location.

The committee also considered a provision, similar to one passed by the Senate last year, which would authorize special pay to attract and retain scientists and engineers in 200 critical positions in the Department of Defense and the Department of Energy national security programs. During mark-up, the committee was informed that the Senate Governmental Affairs Committee was developing a proposal to authorize a special pay program on a Government-wide basis. The committee endorses this initiative, and looks forward to working with the Governmental Affairs Committee in developing this legislation.

POST-EMPLOYMENT RESTRICTIONS

In section 814 of the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Congress substantially revised the post-employment restrictions contained in the "procurement integrity" section of the Office of Federal Procurement Policy Act. These revisions were adopted after significant concern was expressed about the impact of the legislation on the Government's ability to attract and retain high caliber personnel. As noted in the statement of managers accompanying last year's Act (H. Rept. 101-331)—

> much of the concern reflect[ed] the fact that the executive branch, despite its support for these provisions [when the law was enacted] in 1988, failed to issue timely proposed legislation and guidance in 1989. This delay produced misapprehension and miscommunications about the effect of the underlying legislation.

Subsequently, the Congress produced a comprehensive revision of the conflict of interest laws, including Government-wide post-employment laws, in the Ethics Reform Act of 1989. The Ethics Reform Act suspended the procurement integrity law until December 1, 1990, in order to provide an opportunity to determine whether the procurement integrity law should be retained, modified, or repealed in light of the Government-wide restrictions in the Ethics Reform Act. The requirement to issue implementing regulations, however, was not repealed, in order to ensure that if the law was not changed during the period of suspension, there would be ample notice of the regulations implementing last year's amendments before they took effect.

At a hearing on March 21, 1990, members of the committee expressed disappointment that the administration had not yet submitted a legislative proposal to deal with the suspended procurement integrity law, emphasizing the need to provide Congress and the administration with sufficient time to work together on this very complex subject. The administration finally submitted its proposal 3 months later, on June 21, 1990. Despite this unfortunate delay, the Senate Governmental Affairs Committee, to which the bill has been referred, has indicated that it will attempt to schedule hearings and action on the proposal.

The committee's initial review of the administration's proposal indicates that it represents a positive approach, and the committee looks forward to working with the Senate Governmental Affairs Committee in taking action on it. Nonetheless, there is no guarantee that the proposed changes—or any amendments will be enacted before the suspended law comes back into effect this year. That is why it is so crucial that the administration promptly implement last year's amendments. During this committee's March 21 hearing, the Inspector General of the Department of Defense noted: "Whether the [1989] amendments will eliminate the uncertainty . . . depends largely on the regulations implementing those changes. It would be very unfortunate if the Procurement Integrity Provisions went back into effect in November of this year without clear regulations implementing changes made by section 814." The committee agrees, and has included a provision (sec. 833) which would require the Department of Defense to prescribe implementing rules not later than November 1, 1990. The committee emphasizes that the sole purpose of this provision is to ensure that the Department's rules are in place at least a month before the suspension expires, and that this does not relieve the executive branch from the responsibility for issuing the Government-wide rules under section 814 of last year's Act, which are already overdue.

There are several post-employment statutes applicable solely to DoD personnel, which were developed before enactment of the Government-wide provisions of the Procurement Integrity Act and the Ethics Reform Act of 1989. DoD personnel should be subject to the same revolving door rules that apply to other similarly situated officials throughout the executive branch, rather than to a patchwork layering of rules applicable only to certain DoD officials. Accordingly, section 833 would repeal 10 U.S.C. 2397a and 2397b, 18 U.S.C. 281, and 37 U.S.C. 801.

NATIONAL DEFENSE STOCKPILE

In the past, the funds for day-to-day administration and operation of the National Defense Stockpile have been paid from direct appropriations. The amended budget request for fiscal year 1991 includes $33.153 million for this purpose.

The National Defense Stockpile Transaction Fund includes all receipts from the sale and disposal of excess stockpile materials. The committee recommends a provision (sec. 842) which would amend section 9(b) of the Strategic and Critical Materials Stock Piling Act

(50 U.S.C. 98h) to allow the costs of administering and operating the stockpile to be paid from balances of the National Defense Stockpile Transaction Fund.

COMMERCE DEPARTMENT ROLE IN RECIPROCAL DEFENSE PROCUREMENT AGREEMENTS

Section 815 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 amended 10 U.S.C. 2504 to specify that the Secretary of Defense shall regularly solicit the views of the Secretary of Commerce on the commercial implications of agreements with U.S. allies on the research, development, or production of defense equipment. The committee is pleased with the cooperative working arrangements that the Departments of Defense and Commerce have developed to implement section 815.

The committee believes that memoranda of understanding between the United States and its allies for the reciprocal procurement of defense equipment would benefit from similar collaboration. Therefore, it recommends a provision that would include reciprocal defense procurement agreements among the agreements covered by 10 U.S.C. 2504. For all of these agreements, the Secretary of Commerce is to provide information for their negotiation, renegotiation, and implementation, including the negotiation or renegotiation of any extensions, amendments, and annexes.

OMBUDSMAN FOR RECIPROCAL DEFENSE PROCUREMENT AGREEMENTS

The reciprocal defense procurement memoranda of understanding negotiated between the United States and its NATO and non-NATO allies have been an important tool for defense cooperation, and greater rationalization, standardization and interoperability. However, the committee is aware of instances in which the Department of Defense has been following the letter of the procurement MOUs but not the spirit of the agreements. For example, delays in the approval of an export license may prevent the transfer of technical data needed for a foreign offeror to respond to a procurement solicitation within the required time frame, effectively barring a foreign offeror from competing.

The committee therefore directs that by March 31, 1991, the Secretary of Defense assign to an existing official within the Department of Defense the responsibility to act as an ombudsman for MOU implementation. This official is to begin discussions with each of the other procurement MOU signatories to provide a similar point of contact with the necessary authority in the appropriate defense agency.

TECHNOLOGICAL COOPERATION WITH JAPAN

It is a well-known fact that Japanese industry and government have worked closely together to achieve an extremely sophisticated capability for research and development. Some observers have predicted that if current trends continue, Japanese companies' R&D investment will exceed that of U.S. firms before 1995, even though Japan's economy is only about one-half the size of the U.S. economy. At the same time, the Japanese Government continues to guide and support companies in their choice of research and investment directions.

The results of this large and coordinated commitment to research and development are explained in the Department of Defense *Critical Technologies Plan* (March 1990). Among the 20 critical technologies identified by the Defense Department, Japan is found to be "significantly ahead" of the United States in five cases; "capable of making major contributions" in three other technologies; and "capable of making some contributions" in all of the remaining cases. It is also noteworthy that almost all of these 20 critical technologies are "dual-use" in nature (that is, they have both commercial and military applications).

Unfortunately, despite Japan's sophisticated technological capability, the Department of Defense has made little effort, until very recently, to take advantage of it. In 1983, the United States and Japan exchanged diplomatic notes in which Japan agreed to reciprocate in the transfer of technologies with military significance to the United States. In the 7 years since this agreement was reached, only a few minor transfers of Japanese technology have occurred. In October 1988, the Japanese Defense Agency formally proposed five technological areas for potential cooperation. Although there appears to have been some U.S. consideration of this proposal, the reaction by the Defense Department was slow and half-hearted. Earlier this year, the Department of Defense did initiate with Japan its own proposal for collaboration in several areas. The committee hopes that the Defense Department will diligently pursue these possible opportunities for cooperation.

In order to stimulate technological cooperation between the United States and Japan, the committee recommends a provision that would set aside $10 million for such projects. These funds would be taken from those authorized in title II of the bill for basic research, exploratory development, and advanced technology. The Department of Defense should follow several important principles in implementing this provision. First, the participants in a project funded by this provision should share the costs of their project on an equitable basis. Second, the projects should concentrate on developing technologies at the component and sub-system level. Following the controversy over the FS–X aircraft project, the committee believes that technological cooperation would best proceed on a smaller scale and at a lower level of integration. Third, none of the $10 million in funds that are reserved by this provision may be used for research and development for the Strategic Defense Initiative. Although the SDI research conducted by some Japanese companies for the Strategic Defense Initiative Organization may have conventional defense spin-offs, the committee believes that the limited amount of funds set aside by this provision should be maximized for conventional technologies.

Implementation of this provision will require the Secretary of Defense to increase the number of personnel who work in the Office of the Deputy Under Secretary of Defense (International Programs). This official serves as the focal point within the Office of the Secretary of Defense for cooperative research and development between the United States and its allies. At this time, only one person in this office provides staff oversight of cooperative

R&D with both Japan and South Korea. This level of staff support is simply inadequate to exploit the opportunities that are available with Japan. The committee strongly urges the Secretary of Defense to remedy this staffing problem, possibly by reallocating positions out of heavily-staffed security assistance activities elsewhere in the Department of Defense.

The committee believes that increased technological cooperation between the United States and Japan could yield practical economic and military benefits for both countries. In addition, such collaboration would help to sustain the security relationship between the two countries.

DOD IN-HOUSE LABORATORY CONSOLIDATION

The Secretary of Defense has, as a part of the Defense Management Review (DMR), directed that a review of Department of Defense in-house laboratories be made with the objective of achieving near-term savings through consolidations and closures. The committee supports the goals of this review and agrees that it is particularly relevant at this time.

The Commission on Base Closure's December 1988 report recommended that a task force be established to investigate whether defense laboratory capabilities were being diluted, or subsidized by activities better performed elsewhere, as a result of the declining defense research and development budget. The Commission went on to recommend that a set of uniform standards be developed to improve overall laboratory effectiveness, with a view toward consolidating some activities and eliminating functions better accomplished by the private sector.

The committee believes that the Commission's recommendation has more relevance today than when it was originally presented. The recent report of the Carnegie Commission on Science, Technology and Government and testimony given to the Defense Industry and Technology Subcommittee recommends that such a commission be established reporting to the Secretary of Defense and patterned on the "base closing" commission.

Accordingly, section 853 directs the Secretary of Defense to establish a Commission on Laboratory Consolidation and Conversion that will review the current health and effectiveness of the defense laboratories, using the DMR studies as a starting point, and make recommendations on the future organization and structure of these laboratories to the Secretary and the Congress. The Commission should include the feasibility and desirability of converting in-house DoD laboratories to a Government-owned, contractor-operated status, and assess the costs and benefits of such a conversion.

The committee accepts that the organizational structure of the laboratories varies among the military Services and that each Service uses its laboratories for different purposes depending on how they are intended to support that Service's acquisition process. The recommendations of the Commission may have to be tailored to accommodate these differences. Nevertheless, the committee believes that such a study is urgently required and directs the Secretary to establish the Commission and receive its recommendations in time to initiate consolidation, closure, and conversion actions no later than September 30, 1991.

DEPARTMENT OF DEFENSE IN-HOUSE LABORATORY MANAGEMENT

The Department of Defense in-house laboratories play a significant role in maintaining the Nation's technological superiority. They are key participants in the Department's research and development programs and its weapon systems acquisition process. In the future, they will play an important role in other key science and technology areas, such as environmental cleanup and global economic competitiveness.

Numerous studies and testimony received by the Defense Industry and Technology Subcommittee have identified many serious problems facing these laboratories. The committee fully believes that the in-house laboratories may suffer serious, irreversible harm if these problems are not addressed comprehensively and expeditiously.

In its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee directed the Department of Defense to establish a laboratory demonstration program. The committee further directed the Department to provide a plan for implementing this program, to identify and obtain relief from restrictive personnel regulations where necessary, and to identify necessary legislative actions.

The committee is aware that the Deputy Secretary of Defense has directed the Military Departments to implement a number of specific procedural changes at selected laboratories, to seek exemptions from OPM, and to identify required legislative changes. Nevertheless, the committee believes the implementation of the laboratory demonstration program is not advancing as rapidly as is possible or necessary. Specifically, the committee is unaware of any regulatory changes that have been requested, and has received no requests for legislative changes.

The committee believes that the implementation of the laboratory demonstration program is urgently needed and cannot understand the reasons for the Defense Department's delay in requesting the necessary regulatory and legislative changes. The committee is currently working with the Senate Governmental Affairs Committee to develop legislative authority for a Government-wide laboratory demonstration program, recognizing that other departments and agencies face identical problems. When this bill is considered by the Senate, an amendment is planned to be offered to authorize the necessary changes on a Government-wide basis. The committee hopes that with this authority, DoD management will expeditiously address the many serious problems facing its in-house laboratories and begin to find and implement corrective actions.

SCIENCE AND TECHNOLOGY EDUCATION

The National Defense Authorization Act for Fiscal Years 1990 and 1991 directed the Department of Defense to examine its programs that promote education and training, at all levels, in the sciences, engineering, and other disciplines relevant to the DoD mission. It further directed the Department to prepare a report which describes these programs and to include a plan of action for increasing the Defense Department's involvement.

The required report was submitted in March 1990 and noted the Defense Department's clear interest and concern for maintaining an adequate supply of well-trained scientists and engineers. The report explicitly stated, however, that the Department was constrained to undertake only those actions consistent with the mission and statutory authority of the Department. At a subsequent Defense Industry and Technology Subcommittee hearing, the DoD witness testified that while DoD has a clear interest in and concern for maintaining an adequate supply of well-trained scientists and engineers, it does not have the broad mandate and authority to develop and conduct science and engineering education support programs. The witness further testified that the Defense Department's mission is to provide for national security, and any education programs it conducts must be in direct support of that mission.

The committee believes it is unfortunate that the Department of Defense must qualify its support of science and engineering education at all levels given the Department's recognized need for a strong national science and technical education and training infrastructure. To remove any ambiguity concerning the Department's authority to participate in science, mathematics, and technical education at all levels, section 854 explicitly assigns to the Secretary of Defense the authority to sponsor and assist in education and training activities at all levels of education. Further, recognizing that the lines of authority for supporting science and engineering education within the Department are divided between the Director of Defense Research and Engineering and the Assistant Secretary for Force Policy and Management, section 854 directs the Secretary of Defense to establish a high-level office responsible for overall Department policy, coordination, oversight, and implementation of educational support programs.

The committee has become aware of a number of innovative programs, already underway at DoD and DoE laboratories, that are demonstrating outstanding achievements in supporting science and technical education. These programs are also of immediate benefit to the Department's technology base activities. The authority granted in section 854 allows the directors of defense laboratories to enter into educational partnerships with public and private colleges, school districts, and local schools for the purpose of collaborating in developing course curricula and academic research programs. The directors are also authorized to provide scientific support to these education institutions and, where appropriate, to make loans of equipment or to transfer obsolete equipment to these institutions.

Under the authority granted by section 854, directors of laboratories are also authorized to enter into personnel exchange agreements with public and private universities and colleges permitting joint faculty/staff appointments and exchanges, participation of undergraduate or graduate faculty and students in DoD research programs, participation and employment of gifted pre-college students in summer and academic year research programs, and employment of pre-college mathematics and science teachers in DoD science and research programs. Under these personnel exchange agreements, laboratory directors are encouraged to permit qualified employees to lecture or teach at universities or colleges, to establish for-credit research projects at the laboratory, and to establish mentorships, guidance, and assistance programs for pre-college students.

The committee recognizes the importance of women and minorities as a source of future scientists, mathematicians, and engineers and directs the Department to place special emphasis on supporting educational and training programs for this segment of the population. The Department is directed to establish educational partnerships and personnel exchange agreements with historically black colleges and universities and other minority-serving public and private education institutions on a priority basis.

The committee is aware of the strong tradition that cooperative work/school programs have had in science and engineering education in the United States. In these cooperative programs, the traditional academic education methods are reinforced by practical application in the workplace. The Department of Defense is already deeply involved in cooperative education programs involving all military Services and a large number of institutions of higher learning. While these programs are making a valuable contribution, the committee recognizes that greater flexibility in management of these cooperative education programs is needed to permit DoD to make the best use of this program.

Section 854 authorizes DoD activities sponsoring cooperative engineering education programs to (a) make appointments for new participants in the program at a compensation level competitive with similar-situation compensation levels being offered by industry, (b) exclude the students participating in these cooperative work/education programs from non-statutory Department or Service-imposed personnel or payroll ceilings, (c) be granted direct hire authority, and (d) pay travel expenses between the student's school and workplace for up to six round trips per year. The committee recommends that the Department of Defense emphasize recruiting minority and handicapped students through the use of advertisements, school visits, and other appropriate means.

The committee is aware that some Department of Defense organizations have, in the past, excluded otherwise eligible students from participating in science and engineering training programs because one of the student's parents is an employee of that organization, the Defense Department, or the Federal Government. The committee believes that any student who is otherwise eligible should not be excluded from participation in these programs solely because a parent is an employee of any agency of the Federal Government.

One of the Nation's critical problems in supplying an adequate number of scientists and engineers to the workforce is the gap between the pool of available, competent teachers of mathematics and technical subjects and the number needed to adequately support education in these subjects at all levels. Based on a review of the average retirement ages and instructional career paths followed by many military personnel, the Department of Defense and Department of Education have initiated a program titled "New Careers in Education" that promotes second careers as teachers and administrators in the Nation's schools. The program, as presently structured, focuses on making information on these new educational career opportunities readily available to military personnel about to retire. The committee encourages the Defense Department to investigate new ways to enhance and expand the New Careers in Education program by providing training opportunities for active duty military and civilian personnel that will lead to an alternative certification as a high school teacher.

GRANTS TO UNIVERSITIES AND COLLEGES

The committee continues to be unalterably opposed to legislative earmarking of Department of Defense research and development funds to universities and colleges. Section 252 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 provided for the use of the Competition in Contracting Act (CICA) for university and college procurements, but excluded the use of the statutory exception provision. No exception to full and open merit-based competition was permitted in the case of grants. The Act further directed the Department to provide a semiannual report to the Committees on Armed Services of the Senate and the House of Representatives on the use of competitive procedures for research and development contracts with universities and colleges.

Based on the first report, more than 90 percent of all basic research contracts were competitively awarded to universities and colleges in the time period July-December 1989. In all categories, approximately 83 percent were awarded based on full and open competition. The committee congratulates the Department on this fine achievement and urges it to make its future contract awards based on competitive procedures at the same or higher levels as already demonstrated.

The committee has become aware of another approach now being used to circumvent the intent of the Congress in eliminating these earmarks. Specifically, the committee is aware that non-profit institutions have been funded, through legislative earmarks, and the funds provided have then been redirected to a university and college on a sole-source basis. The committee directs the Secretary of Defense to include in his semiannual report notification of all instances where the Department is aware that such an action has taken place. Based on the information provided, the committee may elect to again amend section 2361 of title 10, United States Code, if it determines that such an action is warranted.

OPERATIONAL TEST AND EVALUATION

The committee does not believe that the duties of the Director of Operational Test and Evaluation should include direct management of activities associated with the acquisition of test resources. While recognizing that a need to centralize acquisition management of test assets may exist, the committee does not believe that the Director of Operational Test and Evaluation should take a leading role in providing such management.

Accordingly, funding provided for the capability improvement program in fiscal year 1991 is included as a part of the overall funding provided for defense development test and evaluation. This action by the committee is not intended to limit the participation of the Director of Operational Test and Evaluation in Defense Department internal councils and committees. However, in order to maintain the degree of independence necessary to act as the final evaluator of new or improved weapon systems, the committee recommends that such participation be limited to providing opinion and advice and not include taking part in these organizations as a designated leader or voting member.

ARMY TEST AND EVALUATION ASSETS

The Secretary of the Army has directed the Army Materiel Command to consolidate all major test and evaluation assets into a new Test and Evaluation Command (TECOM), effective October 1, 1990. At the same time, the Department of Defense is studying various proposals to consolidate DoD functions, including in-house laboratories and test and evaluation facilities.

The committee is concerned that the military Services and the Department of Defense are working on these individual consolidation studies with little or no coordination or Congressional oversight. Therefore, the committee believes that the Army should defer its implementation of the consolidation of test and evaluation assets into a Test and Evaluation Command until a comprehensive DoD plan has been defined and the committee has had the opportunity to hold hearings on these issues.

OFFSETS IN DEFENSE EXPORTS

For several years, the committee has expressed its deep concern over the harmful effects that offsets in the sale of defense equipment may have on the competitiveness of U.S. firms, particularly those at lower tiers of the defense industry. Many witnesses have testified before committees of Congress that offsets distort the flow of trade and technology by requiring U.S. companies to engage in inefficient commercial practices.

In response to section 825(a) of the National Defense Authorization Act for Fiscal Year 1989, the President recently announced his policy on offsets in military exports. Unfortunately, the President's announcement was so brief that it hardly amounted to a policy, much less a comprehensive one that addresses the complicated issue of offsets in the detail specified by section 825(a). Whether it agrees or disagrees with the restrained approach to offsets that is suggested by the announcement, the committee is disappointed in the quality of analysis that it reflects.

The President's announcement is all the more difficult to understand because it follows the vigorous intervention of the Secretary of Defense and the Secretary of Commerce in lowering the level of offsets under negotiation in the Korean Fighter Program. In that case, Executive branch officials convinced the South Korean Government that offsets in excess of 30 percent of the value of the contract would not be acceptable to the U.S. Government. Although the specific terms of the offset agreement have not yet been negotiated and implemented, the committee strongly endorses the intervention by the Secretaries of Defense and Commerce. However, their decision to interpose themselves in this case stands in sharp contrast to the "hands-off" approach outlined in the President's policy announcement. The committee expects that future policy papers by the Executive Branch will explain the circumstances in which this kind of governmental intervention is justified.

The committee reiterates that the detailed, comprehensive policy and international negotiations required by section 825 should be pursued vigorously. The President's policy announcement noted that he has "directed the Secretary of Defense, in coordination with the Secretary of State, to lead an interagency team to consult with foreign nations with a view of limiting the adverse effects of offsets in defense procurement." The committee will be closely following the progress of these consultations, as well as the negotiations that take place between the United States and its allies on reciprocal defense procurement memoranda of understanding. Section 816 of the National Defense Authorization Act for Fiscal Years 1990 and 1991 directed the President to make every effort to use these negotiations to achieve international agreements limiting the adverse effects of offsets.

EMPLOYEE STOCK OWNERSHIP PLANS

The committee regards the use of Employee Stock Ownership Plans (ESOPs) as an important and cost-effective means to support critical sectors of the U.S. defense industrial base in adjusting to the changing national defense environment. The committee believes that ESOP formation in defense contractors can contribute to three important objectives. First, it can provide favorable financing conditions for defense contractors important to the national security but who might not otherwise survive in an environment of falling defense budgets. Second, ESOPs can save thousands of jobs otherwise lost by helping defense contractors shift to the production of civilian goods and services. Finally, ESOPs encourage the growth of employee ownership in the United States and, with it, a broader base for acquiring capital, increased competitiveness, and a renewal of the entrepreneural spirit in America.

DEFENSE TOTAL QUALITY MANAGEMENT INSTITUTE

The committee's report accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81) strongly encouraged the Secretary of Defense to continue his commitment to improve quality management within the Department of Defense. The Department has undertaken a systematic program to employ the principles of Total Quality Management which has the potential to achieve significant improvements in effective management of the Department's resources.

The committee encourages the Department of Defense to continue to implement these quality improvement programs and, specifically, authorizes it to investigate the utility of a Department of Defense-sponsored Total Quality Management Institute, to be competitively established, to further support the aims of the Department's Total Quality Management program.

TITLE IX—DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT MATTERS

REDUCTION IN AUTHORIZED END STRENGTH FOR MILITARY PERSONNEL IN EUROPE

The committee believes U.S. forward deployed forces should be reduced consistent with the changes in the threat while placing much greater emphasis on increased specialization among allied nations and much greater reliance on reinforcement with deployable U.S. combat forces to support allies. In light of future instabilities in Europe which are likely, if not inevitable, caution and prudence are clearly in order as the United States builds down its military forces in NATO. American troops in Europe can and should play a stabilizing role during this period of transition. Nevertheless, the greatly lengthened warning time of a credible Soviet conventional attack against NATO allows the United States to reduce the size of its standing armies defending well forward and to emphasize reinforcement instead.

The committee notes that Secretary Cheney has directed the Armed Forces for purposes of drawing up their defense plans for fiscal years 1992–1997 to assume that NATO and the Warsaw Pact will successfully conclude a treaty on Conventional Armed Forces in Europe (CFE) establishing, inter alia, a ceiling of 225,000 on the number of U.S. troops permanently stationed ashore in Europe. The committee believes that the United States must begin planning for a significantly lower level of U.S. forces in Europe.

To put the United States on an orderly course toward, first, the CFE ceiling, and second, subsequent reductions below the 225,000 level, the committee recommends a provision (sec. 901) that would lower the statutory ceiling on U.S. troops in Europe from 311,855 to 261,855 (a reduction of 50,000), effective September 30, 1991. This provision may be waived by the President if he certifies to the Congress that the national security interests of the United States so require. The committee assumes the vast majority of these reductions will be in U.S. Army personnel. The committee also assumes that reductions in the U.S. base infrastructure in Europe will be carried out commensurate with these personnel reductions.

In making this recommendation, the committee assumes there will be continued progress toward an early conclusion of the negotiations on a CFE Treaty, which will require the cooperation of the Soviet Union, and that the President will consult closely with the NATO allies regarding these reductions.

TWENTY PERCENT REDUCTION IN THE ACQUISITION WORKFORCE

The Defense Management Report (DMR) issued by Secretary of Defense Cheney in July 1989 noted that there are approximately 580,000 civilian and military personnel who "spend all or a substantial part of their workday in the acquisition workforce." The Report indicated that the Department would undertake "elimination of management layers and research, development and procurement-related functions that do not add clear value; a consolidation of related functions where possible; [and] an overall improvement in the efficiency of the Department's acquisition management, logistics, distribution and related maintenance activities." The Department's January 1990 DMR "Implementation Progress Report" indicated that such DMR initiatives would lead to a 7 percent or 42,000 person reduction in the acquisition workforce by 1995.

This reduction is far less a proportion of the overall reductions in budget and force structure over the next 5 years than will result from enactment of the committee's recommendations. Military and civilian strength levels will be reduced by about 22.5 percent, including reductions of 20 percent in senior grade positions and general and flag officer authorizations. Moreover, the committee anticipates that substantial reductions can be achieved through implementation of the streamlining initiatives authorized in this bill. Without a 5-year acquisition workforce management plan that takes into account these developments, there is a danger that the acquisition bureaucracy will be maintained at a level far in excess of requirements. Failure to plan for a measured reduction could lead to uneven and inefficient reductions to achieve budgetary savings without adequate consideration of the management needs of the acquisition workforce.

Accordingly, the committee recommends that the acquisition workforce be reduced by 20 percent by 1995 to bring the acquisition community into line with the overall force structure and budgetary reductions recommended by the committee. These reductions are to be taken as part of, not in addition to, any related personnel and budgetary reductions in the bill. To provide an adequate opportunity for planning and implementation, section 902 would require that these reductions be achieved through 4 percent reductions during each of the next 5 fiscal years.

HEADQUARTERS REDUCTIONS

Section 903 would require a 4-percent reduction per year during the next 5 fiscal years in the number of military and civilian personnel permanently assigned or detailed to duty in the management headquarters activities and headquarters support activities of the Department of Defense. The reductions are not required to be a fixed percentage cut at each management headquarters activity or each headquarters support activity. The committee believes that the sum total of these activities, however, can be reduced by 20 percent by fiscal year 1995 to bring headquarters into line with the overall force structure and budgetary reductions recommended by the committee. In order to provide an adequate opportunity for planning and implementation, these reductions may be achieved through 4 percent reductions during each of the next 5 fiscal years. These reductions are to be taken as part of, not in addition to, any related personnel and budgetary reductions in the bill.

The committee recognizes the initial efforts of the Secretary of Defense in his announcement of a 12 percent reduction of the staff of the Office of the Secretary of Defense and a 15 percent reduction in the Joint Staff. The committee believes that deeper cuts are possible throughout the Department of Defense.

The committee strongly recommends that the Secretary consider eliminating management headquarters and headquarters support activities whenever possible. The Secretary's decision to consolidate commissary functions and finance and accounting functions are excellent examples of reductions in overhead that will yield substantial savings. The committee believes that there is unnecessary duplication of functions, for example, in the primary component command headquarters of the military Services within the unified and specified commands and the headquarters of the unified and specified commands. The committee believes, moreover, that several of those primary component command headquarters can be eliminated entirely.

INTELLIGENCE PRIORITIES, RESOURCES AND ORGANIZATION

Since the beginning of the last decade, there has been a tremendous expansion in intelligence budgets, which continued, at least in relative terms, even after the overall national defense budget began to decline starting in fiscal year 1986. The committee recognizes that some of the growth in the Tactical Intelligence and Related Activities (TIARA) programs and the National Foreign Intelligence Program (NFIP) in the 1980s represents regaining ground lost due to reductions in intelligence activities and personnel beginning in the 1970s and to the inclusion of programs in the TIARA and NFIP accounts that previously were funded elsewhere. The committee notes also, however, that a large part of the reductions in the 1970s can be explained in terms of capital substitution of technology for personnel. The committee also notes that the intelligence community continues to invest and rely on extremely expensive technical systems procured in very limited quantities. The committee continues to work and coordinate closely with the Senate Select Committee on Intelligence (SSCI) and intends to work jointly with the SSCI on all matters in this area and related to the provision (sec. 904) described in this section of the report.

In the face of the vastly changed threat and of severe budget constraints, it will be extremely difficult to sustain current capabilities, much less to afford investment in future technologies and new capabilities, without significant reexamination of and change in intelligence requirements, priorities, organizations, and operations. The committee believes that such changes are necessary and possible given the recent dramatic evolution in the international security environment and certain longstanding deficiencies, including in intelligence production and organization.

Easing of requirements for very close scrutiny of the military activities of the Warsaw Pact in some areas appears not only possible but imperative as the Soviet Union withdraws from Eastern Europe. In other respects, however, the need to monitor critical and dynamic events in the Soviet Union and its erstwhile allies is as important as ever. In addition, a variety of arms control agreements are likely to be signed and ratified in the near future, with potentially large verification requirements. The new U.S. emphasis on power projection support for global contingencies and counterdrug efforts also may require re-orientation of some efforts as well as some new or different capabilities. Moreover, the committee notes the increasing need for accurate and timely monitoring of growing threats posed to national security interests by the proliferation of weapons of mass destruction and the means of delivering them.

At the same time, in recent years, numerous individuals and reports have criticized intelligence organizations for significant duplication of effort, insufficient integration and sharing of information, uneven security measures and regulations, pursuit of parochial service or other interests rather than joint intelligence interests, and for persistent gaps in intelligence support and coverage.

Also, the tactical and national intelligence communities appear to be excessively isolated from one another, leaving each free to pursue self-sufficiency in their particular realms. Military commanders appear to seek self-sufficiency through organic systems and organizations on the argument that national systems cannot be relied upon for support. The national community, likewise, appears to emphasize its peacetime missions and pays insufficient attention to combatant commanders' needs.

On the penultimate day of his active duty service as Chairman of the Joint Chiefs of Staff, Admiral Crowe issued a report on the roles and functions of the Armed Forces, as required by the Goldwater-Nichols Department of Defense Reorganization Act.

In this report, Admiral Crowe identified "several areas of overlap and duplication" in intelligence products "that merit further investigation." Secretary Cheney accepted this conclusion and Admiral Crowe's recommendation for a review of the overall organization and production of defense intelligence.

The committee applauds the initiative by the Secretary of Defense, but believes a more comprehensive and purposeful review is warranted. Accordingly, the committee recommends a provision (sec. 904) that would direct a review and realignment by the Secretary of Defense, together with the Director of Central Intelligence, of the organization, priorities, resource allocation, and responsiveness of TIARA and NFIP programs.

A primary goal of the review is to identify all sensible opportunities for streamlining, consolidating, promoting "jointness," and improving support to combatant commanders and the acquisition process. The committee believes that the Chairman of the Joint Chiefs of Staff, as the spokesman for the operational requirements of the combatant commanders, should play a major role in the review, both directly and through his senior intelligence officer.

The committee suggests these matters and issues for particular scrutiny and consideration:

(1) The appearance of redundancy, unnecessary proliferation, and lack of jointness in Washington-area current intelligence centers and collection management and support centers.

(2) Poor support for the acquisition process for weapons systems. The committee recognizes that DoD is already examining reforms in the acquisition area. The committee commends this effort.

Currently, the individual Service intelligence organizations have by far the most influence and technical talent for evaluating threats which justify acquisition decisions. The committee's longstanding concern is that these organizations inherently support their Service's views on the need and justification for preferred acquisition decisions.

The Defense Intelligence Agency (DIA), DoD's joint intelligence agency, is by policy charged with validating threat assessments at key acquisition milestones. The committee believes that DIA now lacks the expertise and authority required to make an independent assessment. In order to gain and preserve the necessary expertise, the committee believes the Secretary of Defense should consider bringing the separate Service science and technology centers under DIA control and management.

The committee understands that the new draft 5.000-series DoD Directives contain a definitive requirement for DIA-validated threat assessments in order for programs to pass milestones. The committee believes it is imperative for the Secretary of Defense, acting through the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C^{3}I)), to ensure that DIA's views are thoroughly and objectively aired at acquisition milestone reviews. It may also be necessary to place the Director of DIA directly under the Chairman of the Joint Chiefs of Staff.

In addition, the Secretary of Defense and the Director of Central Intelligence must take steps to ensure that DIA has timely access to the best and often most sensitive intelligence. This intelligence, in turn, must be provided, in a secure but useful manner, to the Joint Requirements Oversight Council and acquisition program offices. The intelligence organizations also need to do a better job of targeting intelligence resources against critical but poorly understood threats. All too often, DoD has been surprised by threat developments, such as in armor and submarine systems, which have a major impact on its acquisition programs.

(3) DoD should reexamine the policy of "delegated production" to other than the unified and specified commanders. Even there, personnel withdrawals from overseas may dictate bringing some delegated production operations back under DIA control.

(4) The recent dramatic changes in the Communist world and the U.S. response to these changes dictate a thorough review of intelligence requirements and priorities. Prior emphasis on day-to-day indications and warning, readiness, plans, and capabilities in the non-Soviet Warsaw Pact should give way to more emphasis on world-wide political, military, and economic developments, long-term indications and warning, verification, contingencies, and low-intensity operations as the Soviet Union withdraws from Eastern Europe. This review must cut across all intelligence disciplines and programs.

(5) The Secretary of Defense should seek mechanisms for promoting improved management of the TIARA programs. The Secretary of Defense, with the Director of Central Intelligence, also should seek much greater visibility and tradeoffs between the NFIP and TIARA programs.

(6) The Secretary of Defense and the Director of Central Intelligence should consider giving or assigning the NFIP systems an explicit wartime mission and requiring that military utility and survivability be major, explicit factors in system design, architecture, and operation. Furthermore, the merits and problems of operation of the most critical NFIP systems by key combatant commanders should be explored.

(7) Consistent with communications scarcity and vulnerability, personnel reductions, and overseas withdrawals, DoD should seek to consolidate imagery exploitation with much greater emphasis on secondary dissemination via relatively modest to high quality, but low data rate facsimile systems.

In summary, areas where the committee believes substantial benefits could be realized from greater consolidation or strengthened joint operations in DoD intelligence programs and activities include: the multiple science and technology centers; the multiple current intelligence centers; the overlap of intelligence production among Service entities, component commands, and unified and specified commands; the decentralized and uncoordinated programs for collection processing and reporting; and the disjointed program management within the TIARA programs and between TIARA and the NFIP. The responsiveness of national programs and organizations to combatant commanders' needs also must be improved and explained.

In conjunction with the review required by the bill, section 904 would also mandate a 25 percent reduction in intelligence personnel across all intelligence organizations and functions under the TIARA and NFIP programs. The committee, together with the Senate Select Committee on Intelligence, intends to conduct detailed oversight hearings on the review required by section 904(a) and the personnel reductions required by section 904(b). At those hearings, the Secretary of Defense and the Director of Central Intelligence will be expected to: (1) report on their efforts to realign requirements, priorities, organizations, and functions; (2) provide an assessment of the impact of the reductions mandated by this provision; (3) outline and describe any compensatory steps they may deem appropriate; and (4) make such recommendations for legislative action by the Congress as they may deem appropriate.

FUNDING FOR UNIFIED AND SPECIFIED COMBATANT COMMANDS

Last year the Congress created a new fund under the management of the Chairman of the Joint Chiefs of Staff for use in response to requests of the commanders of the unified and specified combatant commands for certain enumerated activities. In two reports to the Armed Services Committees, the Chairman of the Joint Chiefs of Staff advised of problems experienced in the execution of the fund but expressed strong support for continuation of the fund.

The problems experienced in the execution of the fund relate to a number of factors, including those frequently experienced with respect to new programs, and ambiguities as to the intent of the Congress in establishing the fund. The JCS Chairman provided suggestions for clarification of congressional intent.

Despite these difficulties, the committee shares the view of the JCS Chairman and the commanders of the combatant commands that this initiative is a very valuable resource for response to contingencies and to take advantage of opportunities that cannot be foreseen during the budget preparation and approval process. The committee reiterates its direction that the fund may only be used for activities for which funding is not available in a timely fashion under existing authorizations and appropriations.

The committee has responded to several of the suggestions of the JCS Chairman for clarification and amplification of the uses for the fund. Specifically, the committee has added the Commander, U.S. Element NORAD, as a potential participant in the fund; clarified that the fund is not subject to funding limitations expressed elsewhere in the bill or existing law; added the provision of defense articles and services to the list of authorized activities that may be funded from the fund; authorized the use of the special account for procurement purposes, subject to certain dollar limits specified in the bill; and clarified that the activities enumerated in the bill do not authorize use of the special account for any activity that has been denied authorization by Congress.

As indicated in the preceding paragraph, the committee does not intend to repeal any prohibitions contained in the bill or existing law. The purpose of this initiative is to allow the combatant commanders to react to unanticipated contingencies and to take advantage of opportunities that are presented but that are not amenable to speedy response because of a lack of available resources and the delays incident to the normal reprogramming process. The purpose then is to allow the fund to be used to provide funding in a timely fashion and using a streamlined approval process in lieu of the normal process that would otherwise pertain. The committee is aware that the normal authorization and appropriation process is generally adequate to provide funding for the enumerated activities. That process, however, often contains funding limitations or requirements for coordination and approval by designated officials within the Department of Defense or other Federal agencies. The committee intends this initiative to allow the fund manager to exceed those ceilings and to avoid those intra- and inter-agency coordination and approval requirements in the interest of timely action. The fund may not, however, be utilized to conduct an activity that is prohibited by law. For example, if a law is enacted prohibiting the provision of assistance to a country or group, this initiative would not authorize the provision of such assistance. If the law establishes a funding ceiling for a generic area, such as humanitarian assistance, this initiative would allow the expenditure of funds for humanitarian assistance in excess of that limitation, provided that support to that country or group is not otherwise prohibited by law. The relatively small amount of funding made available for this fund ($20 million) and the confidence the committee has in the judgment of the JCS Chairman in managing the fund merit this action.

The committee directs the Chairman of the Joint Chiefs of Staff, after consultation with the combatant commanders and the Commander, U.S. Element NORAD, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by May 1, 1991 detailing the activities underwritten by the fund, the benefits derived from those activities, and the recommendations of the Chairman as to the funding level for such fund in fiscal year 1992.

REPORTS ON NAVAL FORCES

The committee notes that the Secretary of Defense has presented plans indicating that the future naval force structure will have 12 deployable aircraft carriers. The committee directs that the Secretary of Defense begin to move in this direction in an expeditious and timely manner. The Secretary of Defense is directed to report to the Armed Services Committees of the Senate and the House of Representatives on his plans by December 1, 1990.

Moreover, the committee seeks additional information on naval forces and directs the Secretary of Defense to provide a report not later than February 1, 1991, to the Armed Services Committees of the Senate and the House of Representatives on the number, composition and employment of carrier battle groups, which shall include discussion and analysis of the following:

(1) Past carrier deployment patterns—where carriers have been deployed, for what purpose, the duration of deployments, and the continuity of carrier presence in particular regions. Particular attention should be given to the discussion of requirements for aircraft carrier deployments in the Indian Ocean and the Mediterranean Sea.

(2) How those carrier deployments have been changing and are likely to change.

(3) Preferred peacetime deployment patterns, including a description of how and why such patterns might be adjusted over time.

(4) A listing and an assessment of the factors which determine priorities for determining carrier deployments. The discussion should include a comparison of the differences among peacetime deployments, contingency responses, and wartime requirements.

(5) The effects on personnel and family separation of lengthy battle group deployments, and how changes in the duration of deployments addressed above might affect these matters.

(6) A definition of what is a deployable aircraft carrier and the basis for that definition.

(7) The ramifications of reducing the number of deployable aircraft carriers.

(8) Requirements for particular types and numbers of ships included in aircraft carrier battle groups in peacetime, in response to contingency taskings, and in war.

(9) The differences between (a) a carrier battle group operating in the open ocean in war against the Soviet Union, and (b) a carrier battle group operating in a littoral area in response to a crisis not involving the Soviet Union.

(10) The role of battleship battle groups and their relationship to carrier battle groups.

(11) Criteria for evaluating possible reductions in overall naval forces.

STUDY OF MOBILITY REQUIREMENTS AND PROGRAMS

The committee heard testimony from many witnesses this year regarding how the changing world environment and changing security relationships could affect our national security strategy and on the resources required to implement that strategy. When looking at the effects of increased warning times, reduced overall risk of NATO-Warsaw Pact conflict, substantially reduced force levels in Europe after a conventional forces arms control agreement, and a greater appreciation of the demands that would be placed on our Armed Forces to support operations in a Third World contingency, it is not clear that our strategic lift demands are well understood. Some of these developments would tend to argue for being able to get by with less lift capability, while others support arguments for increasing lift forces. Likewise, at any given level of requirements, it is not clear that old assumptions would lead to a mix of airlift, sealift, amphibious lift, and pre-positioning capability that is appropriate to new demands.

Given all these considerations, the committee believes that the Department of Defense should conduct a new study like the Congressionally Mandated Mobility Study, directed by the Department of Defense Authorization Act for Fiscal Year 1981.

The committee believes that the study should be conducted in two phases—

(1) Phase one should consist of an identification of the likely scenarios that will place demands on lift assets, given the fairly substantial changes in threat and other circumstances that have taken place since the last major defense mobility study. The product will be in the form of lift and pre-positioning guidance of sufficient detail to provide a baseline against which lift improvement alternatives can be measured. Alternatives for deciding these broad policy questions shall be developed by the Joint Chiefs of Staff in support of the Secretary of Defense. It shall be the responsibility of the Secretary of Defense for making the final decisions on what guidance will be used as the basis for phase two of the study.

(2) Phase two should consist of an evaluation of alternative methods of meeting the demands for lift identified in phase one. Phase two should also consist of an analysis of initiatives that might be undertaken to reduce the time required to move ground forces to and from airports and seaports and to speed up the time it takes to load and unload them once they are at the ports. Such analysis shall be undertaken by the Defense Science Board and shall include an assessment of whether sealift can assume a greater role in meeting lift requirements, given increased warning times and the potential benefits of faster sealift alternatives.

The Secretary of Defense shall deliver a report on these analyses by March 31, 1991. That report should include an integrated plan for addressing any deficiencies in capabilities that are identified by the analysis, including the costs and capabilities of any additional platforms or systems that need to be developed and/or acquired, and the risks associated with any new technology alternatives identified.

OFFICE OF NAVAL RESEARCH

Section 912 amends section 5021 of title 10, United States Code, to allow the Secretary of the Navy the same flexibility currently enjoyed by the Secretaries of the other military Services to designate either a military officer or civilian executive to head the Office of Naval Research.

CONSTRUCTIVE COMPETITION FOR ROLES AND FUNCTIONS AND THE DEVELOPMENT OF ADVANCED CAPABILITIES

As defense budgets decline for much of the balance of this decade, the Defense Department must root out unnecessary and unaffordable duplication, reevaluate the assignment of roles and functions, and become more *innovative* in the selection and integration of diverse technologies to produce *significant* capability improvements in new weapons systems, as the Nation cannot afford to invest scarce resources in unnecessary duplication or marginal capability improvements. The Department will also have to become more *efficient* in developing these innovative capabilities, since expensive, prolonged development programs will become increasingly unaffordable.

One potential solution is to establish mechanisms for constructive competition between and among existing activities and systems and in the early development of new capabilities. Therefore, the committee urges the Secretary of Defense, with the advice and assistance of the Chairman of the Joint Chiefs of Staff, to institute a program of constructive competition for roles and functions within the Department of Defense, involving the Military Departments and, where applicable, the Defense Agencies.

The committee has also provided for constructive competition in various sections of this bill in connection with existing or developing facilities, weapons, and systems in order to identify and take appropriate action with respect to duplications, vulnerabilities, and opportunities for significant capability improvements.

MILITARY INVESTIGATIONS

The committee conducted hearings into the explosion on board U.S.S. *Iowa* on April 19, 1989, including a hearing on May 25, 1990 when it received testimony from the General Accounting Office and Sandia National Laboratories that looked into the Department of the Navy's investigation at the request of the committee. In addition to casting grave doubt on the Navy's conclusions, the testimony raises significant questions about the Navy's investigative process. Areas of concern include the guidelines for requiring formal hearings; standards of proof; and representation of persons who are unable to represent themselves due to absence, death, or disability.

The committee also inquired into the Department of the Army's investigation into the use of a "ruse" which involved the improper turnover of a U.S. soldier to foreign military authorities for interrogation and resulted in the soldier's mistreatment. The Inspector

General of the Department of Defense investigated this matter, including the investigative procedures of the Department of the Army that were utilized in this case. The records of the soldier who was the victim of mistreatment were corrected and the Army's review of the incident, including the action of the chain of command, is still ongoing.

The committee is reviewing other serious cases from each of the military Services that came to the attention of the committee during the last year. Those cases, together with the two instances discussed above, raise serious concerns about the conduct of administrative fact-finding investigations, the review process for such investigations, and the standards and procedures applied in assessing accountability for improper conduct by the chain of command.

The committee is also concerned over the diverse approaches that are taken by the Military Departments in formulating rules and procedures for administrative fact-finding investigations. There does not seem to be any compelling reason for these diverse approaches. The committee urges the Secretary of Defense, using such resources as he deems best suited to such an effort, to review the rules and procedures utilized by the Military Departments in conducting, reviewing, and acting on administrative fact-finding investigations. The committee recommends that particular attention be paid to the following issues: civilian oversight of the process; the procedures for reviewing and acting on investigations; protection of rights of individuals, living and deceased, including whether there should be a right not to be identified as responsible for wrongdoing or shortcomings without due process, even though criminal or administrative action is not taken against them; accountability of commanders and commanding officers, including rules governing submission of adverse information to officer selection boards; the desirability of uniformity among the Military Departments with respect to these rules and procedures; and the need for an investigative or advisory organization within the Department of Defense, but outside the Military Departments, to conduct or oversee the investigation of certain types of incidents. The committee would expect, as part of this review, that recommendations would be presented to the Secretary as to changes in the rules and procedures of the Military Departments that would improve and, where feasible, make uniform the administrative investigative process.

The committee plans to continue to follow closely the several cases that have already come to its attention and to monitor the investigative activities of the Military Departments into serious incidents that arise during the coming year.

STRATEGIC AND THEATER NUCLEAR NET ASSESSMENTS

The committee is concerned with the lack of a stable and well justified program for strategic and theater nuclear forces. The current debate over the future shape of our strategic forces requires future budget requests to be justified in terms of clear measures of the trends in the nuclear balance, with and without arms control. There is a need for budgets which are justified for nuclear weapons in net assessment terms, and with measures of the balance which go beyond narrow statistical data like percentages of target coverage.

In order to ensure that it can conduct its review of future defense budgets with the proper information on the strategic balance, the committee directs that the Secretary of Defense shall provide to the Congress an assessment of the impact of each element of the triad, and each major weapons system in the triad, on the strategic and theater nuclear balance as an appendix to the annual Joint Military Net Assessment.

This assessment shall include an analysis of the trends in the balance over the last 5 years, and project the balance over the coming 10 years based upon the current budget request and defense program. It shall compare the requested and projected spending on U.S. nuclear forces with that of allied and potential threat countries. It shall show the projected impact on the balance of changes in the nuclear capabilities of each major type of weapons system, and each major weapons system that the United States, allied, and potential threat nations will deploy during this period.

The assessment of the balance will include quantitative and qualitative assessments of the impact of each element of the triad, and each major weapons system, on four key measures of strategic and theater nuclear balance: deterrence, the control of escalation, damage limitation, and conflict termination.

The assessment shall show the projected impact of the START and other applicable arms control agreements on United States strategic and theater nuclear programs and the projected nuclear balance. The Secretary's evaluation shall address anticipated requirements for sizing and modernization of U.S. nuclear forces in a post-START environment. The assessment shall also address the impact of a potential START and other relevant arms control agreements on our weapons, including an explanation of the techniques used to establish targeting policy and to evaluate our capability to execute this policy.

This explanation of strategic nuclear targeting policy shall include:

(1) the relationship between targeting policy and the generation of requirements for strategic nuclear forces, including analysis of trade-offs between force size, target selection, and military capability;

(2) the relationship between arms control policy and targeting policy to include the effect that targeting policy has on formulation of U.S. arms control objectives;

(3) the impact of political changes in Eastern Europe on current targeting policy and the potential for significant changes in targeting policy; and

(4) the relationship between targeting policy and the potential incentives for either the United States or the Soviet Union to adopt destabilizing strategies such as launch on warning or launch under attack.

The assessment shall include an analysis of the key issues shaping the budgeting and programming of U.S. nuclear forces, including:

(1) U.S. ICBM basing and vulnerability, and the comparative impact of the Rail Garrison M-X and recommended basing mode of the SICBM on the balance;

(2) the need for more than 18 Trident SSBNs;

(3) the need for penetrating bombers such as the B-1B and B-2;

(4) the need for modernization of U.S. theater nuclear forces;

(5) the impact of the British and French national deterrents on the balance;

(6) Soviet ability to modernize its SS-18 force under the proposed START constraints on flight testing;

(7) the military capability, particularly against hardened targets, of a modernized SS-18 force both constrained and unconstrained by START;

(8) U.S. ability to monitor modernization and deployment of Soviet strategic forces by unilateral U.S. national technical means and U.S.-Soviet cooperative measures, including onsite inspection;

(9) the impact of START constraints on air-launched and sea-launched cruise missiles (ALCMs and SLCMs) on the nuclear balance; each country's capability to deploy ALCMs and SLCMs if unconstrained by START and the effect on the nuclear balance;

(10) the impact of the Soviet Backfire bomber on the U.S.-Soviet nuclear balance under a START agreement; and

(11) Soviet ability to modernize the SS-24, SS-25, and other land- or sea-based long-range ballistic missiles to make them hard target weapons.

TITLE X—STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM

The committee believes that the ongoing transformation of East-West relations invites a fresh look at the traditional concept of national security. The end of the Cold War reduces the likelihood of global conflict, nuclear or conventional, but it does not alter regional tensions and animosities.

THE ENVIRONMENT IS A NATIONAL SECURITY CONCERN

The committee believes that threats to the environment should be regarded as national security threats for several reasons. First is the possibility that significant environmental changes will contribute to the likelihood of unrest, violence, chaos, and conflict, and that this may ultimately require the use of U.S. military power. The first step in dealing with national security problems is to "understand the threat." With respect to many aspects of environmental change, including the onset, extent, and rate of change, the scientific community today does not fully understand the nature of the threat. The national security community has a stake in the outcomes revealed by improved scientific knowledge.

Second, the *defense establishment* [1] has unique capabilities and resources that can contribute to a better understanding of the magnitude of possible environmental changes.

Finally, the defense establishment is undeniably a part of the *problem* of environmental degradation. Decades of past practices that, with the benefit of hindsight, were environmentally unsound have left many sites, government reservations, and U.S. military bases-both here and abroad with localized but drastic environmental damage. These environmentally damaged sites will have to be cleaned up. The cost will be enormous, and the job will take years, perhaps decades, to complete. In some cases, current methods are plainly inadequate, and new methods will have to be invented and developed. In addition, ongoing operations by the defense establishment will continue to generate hazardous materials. Better production and disposal methods can reduce both the hazards and the cost of operations.

ENVIRONMENTAL DATA GATHERING AND ANALYSIS

The committee believes that the defense establishment is in a position to provide unique assistance to enhance the research efforts of the scientific community and other governmental organizations, including Federal laboratories and research centers, DoE defense and multi-purpose laboratories, and DoD laboratories, on global environmental change:

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[1] For the purposes of this section, "defense establishment" refers to the Department of Defense, the national security activities of the Department of Energy, and portions of the intelligence community.

—First, the Department of Defense and the intelligence community have archived data from intelligence sources that may provide a record of great value to global change researchers, and may fill gaps in knowledge and understanding of environmental trends during previous decades. In addition, there may be ongoing and future data collection activities which, if shared with the global change research community to the fullest extent possible, might benefit the quality of scientific research.

—Second, the defense establishment already operates routinely a number of sensor platforms, such as aircraft, surface ships, submarines, and various space platforms, which can be used directly or can be modified to collect additional scientific data during, and without interfering with, normal operations. The defense establishment should work closely with the environmental research community to determine additional data requirements and techniques for collection.

—Third, the defense establishment can make available to civilian research agencies and entities computational time on supercomputers, such as those at the National Test Bed and the National Laboratories. Access to more computational power to process more and better data can significantly improve our ability to model atmospheric, hydrospheric, and biospheric behavior. This, in turn, would support much more accurate methodologies for predicting the impact of human activities on the Earth's natural systems—and vice versa. Better methodologies will be essential for the analysis of alternative policies for mitigation or remediation of adverse environmental effects. Improved methodologies are also essential for guiding the collection of, and properly analyzing new data, such as those which will be provided by the Earth Observation Satellite (EOS), a NASA initiative that will become operational later in this decade.

DEFENSE AGENCIES AND ADVANCED ENERGY TECHNOLOGIES

In the committee's view, energy generation and conservation are areas where national security and civil-sector interests coincide. The United States must be assured of access to the energy sources required to meet the needs of the next century, at costs that are consistent with a robust economy, and in forms that relieve pressure on the global environment. From this perspective as well, the committee believes that technologies for cleaner, more efficient generation of energy and for energy conservation are of substantial relevance to the national security.

The committee notes that the defense establishment is already supporting several military programs in advanced energy technologies. These technologies may demonstrate potential for applications in energy research, including superconducting magnetic energy storage; electricity generating systems, including photovoltaic power systems, fuel cells, small-scale generators, high-efficiency gas turbines, inertially confined fusion systems, bio-mass energy

systems, and new nuclear reactor designs; field-ready electricity generation and control systems for rural and remote applications; applications of materials research for more efficient generation, conservation, and use of energy; construction, lighting, ventilation, and other technologies for more efficient buildings, such as both new and retrofit construction; and alternative fuels research aimed at improving fuel efficiency and pollution control. The range of DoD and DoE activities in these fields leads the committee to believe that these activities, purposefully coordinated with and transferred to other government efforts and with industry, can be of substantial value. The program can also assist DoE and DoD in identifying existing cost-effective civilian technologies that can be directly used. The committee notes that parts of the defense establishment can also serve as experimental test-beds for energy conservation ideas, utilizing their wide variety of facilities and their large motor vehicle pools, that could ultimately address the problems of air pollution and water pollution in urban and inner city areas. The committee emphasizes that many of these activities may fall within the purview of the Committee on Energy and Natural Resources as well as the Committee on Armed Services; the committee expects and urges the Energy Committee to exercise its oversight, and looks forward to working closely with it.

DEFENSE AGENCIES AND TECHNOLOGIES FOR ENVIRONMENTAL CLEANUP

In recent years, the committee has aggressively addressed the problem of radioactive, toxic, and mixed waste dumps and repositories, and the risks of major contamination of soil, ground water, and surface waters. Much of this contamination was created or extended by activities relating to national security. The committee believes that the defense establishment has a clear self-interest in the development of better technologies for tracing contaminants, migration patterns of contaminants, and for more cost-effective methods of disposal, identification, treatment, and cleanup of sites containing toxic, radioactive, and hazardous materials. In prior years, the committee has undertaken several initiatives in this regard but recognizes that additional research and development is urgently needed; these activities should continue and should be closely coordinated with, but not duplicated by, this initiative.

In addition, because some hazardous or nuclear waste will continue to be generated as by-products of defense operations, the defense establishment needs more investment in processes and methods to reduce waste, to address waste minimization, and to address hazardous materials substitution. The Defense Department must work to eliminate hazardous substances and develop safe and economic waste disposal methods.

The committee notes that U.S. technologies for more effective waste retrieval and cleanup, as well as identification, treatment, and storage, will find ready markets in many countries, especially in the newly emerging democracies of Eastern Europe and in Third World countries.

The Defense Department also has a significant stake in the demilitarization of chemical weapons, an activity that takes on greater prominence in light of the agreement at the May 1990 summit by the United States and Soviet Union to destroy huge stocks of chemical weapons and agents.

ESTABLISHMENT OF THE STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM

The committee believes that a concerted program of research on these national security aspects of environmental problems should be established. DoD and DoE operating agencies, research laboratories, universities, and Federal Contract Research Centers (FCRCs) supporting them have already demonstrated substantial competence in contributing to research on selected environmental issues. In addition, a number of defense contractors have the ability to contribute toward solutions to these problems. However, the committee believes that it is necessary to marshal the resources of the defense establishment, and to integrate the efforts of the defense establishment with ongoing efforts in the non-defense sectors, both governmental and private.

The committee therefore mandates in chapter 172 of title 10, United States Code, the creation of a new program to be referred to as the Strategic Environmental Research Program, and authorizes $200 million for this program for fiscal year 1991. The committee further mandates the creation of a new inter-agency management group to be known as the Joint Strategic Environmental Research Program Council. The Council shall be responsible for the formulation and direction of the program, which will require coordinated management among the Department of Defense, the defense portion of the Department of Energy, and the intelligence community, as well as careful coordination with other Federal agencies.

The Joint Strategic Environmental Research Program Council, as its first priority, should develop a 5-year plan for sharing and transferring defense establishment data, information, research, and technologies that are of interest and value to individuals and organizations engaged in environmental research and development of environmentally beneficial technologies. The areas of cooperation fall into the three categories mentioned previously: environmental data gathering and analysis, energy technology development, and environmental cleanup technology development.

The committee further requests the National Academy of Sciences to assist in establishing a permanent advisory board to assist the Joint Strategic Environmental Research Program Council. This advisory board can be of assistance in many ways: by maintaining liaison with the civilian research community, by offering scientific advice on specific deficiencies in the collection and analysis of environmental data, by evaluating proposed areas of relevant defense-funded research and development, by identifying potential research and development areas, and by assisting in the development of criteria for the selection of projects to be funded under this program.

RELATION TO OTHER ENVIRONMENTAL ACTIVITIES

The committee wishes to emphasize several points regarding this initiative. First, it is not the committee's intention to extend jurisdiction or oversight into areas that are within the purview of other congressional committees, such as the Committee on Energy and

Natural Resources, and the Committee on Environment and Public Works. The Committee on Armed Services sees the function of this initiative as *complementary* to the activities of those committees and of the agencies under their oversight.

In the committee's view, the defense establishment has a clear but delineated interest in the consequences of environmental damage. The defense establishment has an interest in the *outcomes,* to the extent they impinge on U.S. security; it has certain unique capabilities that it can contribute to understanding the consequences of environmental damage; and through its past and continuing operations, it has an obligation to clean up past damage and prevent future damage. The committee intends to work closely with other committees of jurisdiction on environmental issues to gather their recommendations as to how to improve this initial proposal in future years.

The committee further wishes to emphasize the importance of developing the Council's 5-year plan for the Strategic Environmental Research Program in close consultation with other governmental agencies and important centers of scientific research. Only in this way can the initiative be structured to support and to augment the substantial ongoing research effort to understand environmental interactions and changes.

The committee expects the Council to coordinate its research and data-gathering plans with those of other government agencies and entities with major interests in environmental issues, including the Environmental Protection Agency, the Commerce Department, the National Science Foundation, the Department of Agriculture, the Committee on Earth Sciences, the Office of Science and Technology Policy, the Office of Naval Research, the National Oceanic and Atmospheric Agency, and the Agency for International Development.

COMPOSITION AND OPERATION OF THE JOINT STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM COUNCIL

The Council will consist of the following eight members:

—the Assistant Secretary for Environmental Restoration and Waste Management, Department of Energy;
—the Director of Defense Research and Engineering, Department of Defense;
—the Vice Chairman of the Joint Chiefs of Staff, Department of Defense;
—the Assistant Secretary of the Air Force for Space, Department of Defense;
—the Assistant Secretary of Defense for Production and Logistics, Department of Defense;
—the Assistant Secretary for Defense Programs, Department of Energy;
—the Administrator of the Environmental Protection Agency or his designee as a non-voting member; and
—the Executive Director of the Council as a non-voting member

The committee recommends that the Director of Defense Research and Engineering serve as Chairman of the Council during fiscal year 1991. Thereafter, the chair shall alternate each fiscal year between a representative of the Department of Energy and a representative of the Department of Defense. The development of procedures for the Council's operation is left to the initial members; the committee will entertain recommendations, if any, by the Council for specific legislative actions next year.

In lieu of selecting a designated management agency, such as the Defense Advanced Research Projects Agency, to provide direct managerial and day-to-day operational oversight of the program, the committee directs the Council to establish a small, full-time support staff headed by an executive director from authorized manning levels. The committee hopes that the Departments of Defense and Energy are able to appoint an Executive Director as quickly as possible but in any event no more than 30 days after the enactment of the bill. The committee will entertain recommendations by the Council for changes in this austere management approach in conjunction with next year's defense budget request.

EXPENDITURE OF FUNDS

Funds made available for the Strategic Environmental Research Program from appropriations pursuant to this authorization may be obligated and expended by the Council for the following purposes:

—for defense-related environmentally relevant research and development at DoD laboratories, DoE multi-purpose and defense laboratories, and FCRCs;

—for reimbursement at marginal cost for excess computer time on supercomputers installed at Federal agencies and national laboratories made available to environmental researchers;

—to reimburse Federal agencies for de-archiving and sanitizing previously-collected data of relevance to environmental research;

—for modifications to existing military or intelligence platforms in order to enhance the collection of relevant environmental data;

—for incremental increases in the operating costs of military systems that may be incurred by extending the duration or locale of already-approved operations for the sole and express purpose of the collection of particularly valuable environmental data;

—for modifications to existing DoD and DoE defense facilities and assets to test alternative fuel uses, and energy conservation and management approaches and techniques; and

—for such other purposes as the Council may deem necessary in order to carry out its broad mandate, subject to the requirement that, for all obligations in excess of $5 million, the Council shall notify the Committees on Armed Services and Appropriations of the Senate and the House of Representatives in writing of the amount of the obligation and the Council's justification for its decision to obligate the funds.

REPORTING REQUIREMENTS

The committee will expect the Council to deliver to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives not later than March 15, 1991, a written progress report on its initial period of organization and operation. The letter report should cover at least the following:

—the Council's progress in formulating a 5-year plan, including a 5-year funding profile for the program.

—the Council's consultations and interactions with other environmental groups and agencies;

—the Council's ability to obtain the cooperation of the Military Departments and the unified and specified commanders in the use, during routine operations, of military platforms for gathering environmental data;

—plans and activities, if any, within each of the categories described in the section of this report entitled "Establishment of the Strategic Environmental Research Program";

—an evaluation of the likely availability of excess computer time on supercomputers within the defense establishment during the period of the 5-year plan, and a recommendation, if appropriate, for either accelerated acquisition of supercomputers by the defense establishment, the acquisition of dedicated supercomputers for environmental research, or the purchase of increments of computer time from other public or private agencies;

—recommendations, if any, for additions to or changes in the membership of the Council;

—recommendations for funding requirements for the initiative during fiscal years 1992 and 1993;

—recommendations, if any, for expanding the allowable percentage of Independent Research and Development (IR&D) funds that defense contractors may expend for research on defense-related environmental issues;

—recommendations for proposed rules governing the operations and decision making processes of the Council;

—recommendations, if any, for the designation of a specific agency to oversee day-to-day operations and management of projects within the initiative once funding is obligated; and

—such other matters as the Council or the individual Council members may wish to include.

The committee also directs the Scientific Advisory Board to prepare and submit an interim report, by March 15, 1991, similar to the report required of the Council, on the Board's initial activities, and that identifies areas of concern and other matters as the Board members wish. In addition, the committee directs the Board to review and provide recommendations with respect to the CFC Advisory Committee, established pursuant to section 356 of the National Defense Authorization Act for Fiscal Years 1990 and 1991.

USE OF INDEPENDENT RESEARCH AND DEVELOPMENT (IR&D) FUNDS FOR RESEARCH ON DEFENSE ENVIRONMENTAL ISSUES

The committee further notes that, under current contracting practices, defense contractors are permitted to expend limited IR&D funds on defense applications and technologies of relevance to the national defense. The committee directs the Department of Defense to modify current regulations to permit up to 10 percent of available IR&D funds to be used annually for research by defense contractors on the types of defense-related environmental issues identified in this report.

ACCESS TO RESEARCH DATA

The committee intends that access to data and other information bearing on environmental issues shall, to the maximum extent possible consistent with considerations of national security, be declassified and made widely available to research institutes and scientists working on environmental problems. The committee also intends that, to the maximum extent possible, environmental researchers not be required to apply for security clearances in order to access data, and other relevant information, and analytical capabilities, including computers, owned or operated by the defense establishment.

TITLE XI—MILITARY DRUG INTERDICTION AND COUNTER-DRUG ACTIVITIES

The committee notes with approval the decision of the Secretary of Defense on September 18, 1989 to declare that combating illegal drugs is a high priority national security mission for the Department. The committee further applauds the action of the Secretary in utilizing the operational chain of command as the focus for the Department's performance of this mission. This action is in conformity with the Goldwater-Nichols Department of Defense Reorganization Act. Since Secretary Cheney's decision, there has been marked improvement in the Department's commitment and contribution to the national counter-drug effort.

The submission of a separate Drug Interdiction and Counter-drug Activities budget and budget justification book for the Department of Defense for fiscal year 1991 is welcome. This submission has greatly facilitated the committee's efforts to properly oversee and authorize this important effort.

The committee emphasizes that it totally supports the administration's decision not to involve members of the Armed Forces of the United States directly in counter-drug operations by host nation police or military forces overseas. It has been a long-held policy of this committee to keep U.S. military personnel out of such missions.

The committee is disappointed, however, in the implementation of section 1201(g) of the National Defense Authorization Act for Fiscal Years 1990 and 1991, which provided $40 million in fiscal year 1990 to carry out additional counter-drug support to civilian agencies consistent with section 1212 of that Act. The Department has advised the committee of its support for an extension and broadening of that authority, citing unfamiliarity of Federal agencies with its provisions and ambiguities as to the intent of Congress, as the reasons for lack of its greater use, rather than a lack of need on the part of Federal agencies or a lack of enthusiasm by the Department.

The committee has therefore extended that authority for an additional year, increased the funding to $60 million, and broadened the categories of assistance in an attempt to make it more responsive to the legitimate needs of civilian agencies. The committee has also extended the reach of that authority to State and local civilian law enforcement agencies, at the request of a Federal agency, to ensure that important counter-drug activities are available even though the enforcement agency is not a Federal agency, provided a Federal agency supports the effort. In connection with requests for support to Federal, State, or local agencies, it is noted that section 1202 provides that the authority is granted to the Secretary of Defense and the request is to come from the official who has the responsibility for counter-drug activities of the requesting agency. It is emphasized that the committee does not intend to limit the authority to approve or request such support to those individuals and encourages the delegation of both authorities to the lowest level possible so that excessive bureaucratic delays are avoided. The committee further encourages the approval of requests for broad areas of support or programs and delegation of authority in specific cases to the field level whenever that is feasible.

The committee has made a number of other changes designed to broaden the authority of the Department to provide support. Chief among these broadening changes are the specific authority to maintain, repair, and upgrade equipment, including software, even though such equipment and software do not belong to the Department, provided it will assist in promoting interoperability with equipment and software of the Department; the clarification that transportation may be provided to foreign as well as U.S. national personnel, to supplies and equipment and the inclusion of associated per diem expenses when it will facilitate counter-drug operations both at home and abroad; the clarification that the Department of Defense may undertake unspecified minor construction activities pursuant to section 2805 of title 10, United States Code; the specific inclusion of associated support expenses and provision of materials in connection with counter-drug related training; and the authority to conduct aerial and ground reconnaissance. The committee would also authorize the Department of Defense to utilize contractors when contractors are normally used by the Department for its own purposes and when the equipment and services cannot be readily provided by organic units of the Department; clarify that the Secretary may provide support even though there may be a short term adverse impact on military preparedness; and specifically authorize the planning and execution of training or operations even though these activities are for the primary purpose of aiding civilian agencies.

The committee is aware of the significant impact that the detection and monitoring activities of the Department have had on the operations of drug traffickers in seeking to transport illegal drugs into the United States during the last year. The contribution that such activities has made is a tribute to the dedication of the men and women of the armed services and DoD civilians. The increase of the use of the Southwest border for illegal drug importation activities is troubling, however. The committee believes that the Department of Defense can play a significant role under the broadened authorities of section 1202, particularly with respect to aerial and ground reconnaissance and transportation of personnel, supplies, and equipment, in addressing this development. The committee believes that it is necessary, however, to note that the restrictions on direct participation of military personnel in law enforcement activities as codified in section 375 of title 10, United States Code, must be scrupulously enforced. This does not mean, however, that military personnel might not be exposed to the threat of the use of force against them, particularly on the Southwest border.

The amended defense budget request for fiscal year 1991 included $242.8 million in the OSD drug interdiction and counter-drug activities account for one sector of the proposed Over-the-Horizon Backscatter (OTH-B) radar central system. This provided $214.0

million for procurement and $28.8 million for associated military construction costs. The committee recommends no authorization for the central system procurement or associated military construction in this account.

The committee concludes that the proposed central system is not justified. The Air Force has abandoned the cruise missile mission for the system. This mission was the reason for the mid-1980s decision to add two sectors to the central system and move its planned location from the Texas-Oklahoma region to far northern sites. Without the need for the two east- and west-facing sectors, the committee believes there are less expensive and more rational means to satisfy remaining requirements for wide-area surveillance of the southern regions.

The U.S. Navy plans a Re-locatable Over-the-Horizon Radar (ROTHR) in Virginia facing southeast. The coverage provided by this radar would very nearly duplicate that of one of the proposed central system OTH–B sectors. In this period of budget austerity, such duplication cannot be tolerated. With suitable modifications, the Navy's ROTHR can perform its intended Navy mission and support NORAD and the counter-narcotic effort.

Buying another ROTHR for siting in the southwest for additional counter-drug support and to complete backscatter radar coverage of the periphery of U.S. borders for air defense, tactical warning, and airspace sovereignty missions appears to be more cost-effective than procuring the proposed OTH–B central system.

This step is the least expensive way to provide southern backscatter radar coverage and affords an opportunity to reduce redundancy between Air Force and Navy programs and to ensure interoperability between them.

Accordingly, in lieu of the request for OTH–B funding, the committee recommends $80.558 million for ROTHR procurement, $8 million for spares, $10 million for construction, $20 million for track correlation software modifications, and $10 million to develop interoperability between ROTHR and NORAD's air defense command, control, and communications systems.

The committee recognizes that a southwest-oriented ROTHR will not be available for some time due to the probable need for land acquisition, an Environmental Impact Statement, system production, and construction activities. The committee notes, however, that an existing backscatter research radar can be rapidly modified and adapted to provide an interim capability for surveillance and tracking in support of the counter-drug and air defense missions. The cost of modifying and operating such a radar while ROTHR is being procured is very small. In addition to an interim operational capability, such a radar can provide essential near-term lessons learned.

Accordingly, the committee recommends an authorization of $6 million in fiscal year 1991 for DoD to procure services from a commercial backscatter radar source. These funds should be used to reorient the radar for optimum coverage, to provide real-time tracking and analysis, to upgrade the antenna system, and for operating the radar. The committee expects DoD to budget for this program in fiscal year 1992 and beyond, and to evaluate the costs and benefits of adding new transmitters for enhanced performance.

The committee takes note of the substantial contribution that the National Guard, when not in Federal service, has made to drug interdiction and counter-drug efforts pursuant to the plans of State Governors. The budget request for fiscal year 1991 contains $81.0 million for National Guard operations, with $76 million for support activities and $5 million for procurement of communications, sensor, and direction finding equipment. The committee understands that the budget request was prepared prior to the receipt of the State Governors' plans and that those plans will require substantial additional funding. The committee also notes that pursuant to last year's amendment, the States are using Guardsmen to accompany law enforcement personnel in unmarked cars during drug operations and for surveillance of crack houses or airports. It remains our concern that Guardsmen not be placed in situations for which they are not trained. The Secretary of Defense has authorized, on a trial basis, the funding of a California National Guard proposal to conduct a course to train Guard and law enforcement managers and planners in the use of military resources for drug interdiction, eradication, and other operations. The committee believes that the inclusion of a course to train Guardsmen who would be supporting law enforcement personnel at the street level and would focus on law enforcement activities and procedures would be a valuable addition, at least on a trial basis.

Accordingly, the committee has provided an additional $40 million for National Guard pay and allowances; an additional $10 million for procurement of equipment; and an extra $3.2 million for Army National Guard operations and maintenance for the extension and expansion of the California National Guard pilot training program.

Pursuant to section 1213(b)(3) of the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Secretary of Defense is required to submit a report on the drug interdiction and counter-drug activities of the Department of Defense during the preceding fiscal year. Part of that report is required to include "specific information as to the size, scope, and results of Department of Defense drug interdiction efforts." Now that the Department's drug interdiction and counter-drug activities program has matured and in view of the expanded authorities that have been provided by law, the Secretary of Defense is directed to include in that report the following: a description of the allocation of funds by function and agency and a report of actual outlays; an evaluation of the comparative cost effectiveness of the Department's operations and activities; appropriate measures of effectiveness and application of such measures to the various operations and activities; and an assessment of the overall contribution of the entire Department of Defense's program to the national counter-drug effort.

Finally, as more fully discussed in the part of the report relating to section 2813, the committee recommends modifying section 2819 of the National Defense Authorization Act for Fiscal Year 1989 to broaden the scope of the Commission on Alternative Utilization of Military Facilities to include higher security level prisons, including "shock incarceration" facilities, commonly known as "boot camps."

TITLE XII—GENERAL PROVISIONS

TRANSFER AUTHORITY

Section 1201 would permit the transfer of an authorization for obligation for fiscal year 1991 to any other authorization made available in Division I of the bill upon determination by the Secretary of Defense that such a transfer would be in the national interest. The provision would provide the authority for reprogrammings involving the transfer of authorizations between authorizations as set out in the bill.

The committee believes the substantial reductions that will be made to defense programs over the next several years require the flexibility that the reprogramming process provides. However, the committee is concerned that the administration's use of the reprogramming process earlier this year in a way that allowed the Department of Defense to circumvent the outlay reductions required by the Gramm-Rudman-Hollings Act has placed the future of the reprogramming process at risk.

Negotiations to resolve the military personnel funding shortfall in fiscal year 1990 consumed an excessive amount of time, both for the Secretary of Defense and the Armed Services and Appropriations Committees of the Senate and the House of Representatives, over the course of several months. During all this time, the fate of thousands of military personnel and their families was left uncertain, causing much needless anxiety.

In the future, the committee believes that once the President has made his decision whether or not to exempt military personnel from a sequester order, the administration should be prepared to live with that decision. The committee hopes that the Department of Defense will make its recommendations to the President on this matter with the same understanding.

ANTICIPATED SAVINGS FROM CONSOLIDATION STUDIES

The amended defense budget request included anticipated savings of $300 million in fiscal year 1991 from consolidation studies being carried out as part of the Defense Management Review. To date, the Defense Department has not identified specific savings that would result from these studies. The committee recommends a provision (sec. 1202) that would reduce the amounts otherwise authorized in the bill for military personnel and operation and maintenance activities by $300 million in order to achieve the anticipated savings.

FIVE-YEAR DEFENSE PROGRAM

Current law (10 U.S.C. 114a) requires the Secretary of Defense to submit the 5-year defense program in conjunction with the annual submission of the President's budget. The committee is extremely disappointed that the Secretary of Defense failed to fulfill that requirement in connection with the fiscal year 1991 request. The absence of a long-range plan outlining the administration's proposals for the future direction of U.S. military forces during this period of profound change seriously impeded the committee's work this year.

The Secretary of Defense has stated that he intends to submit a 6-year defense program next year. This is a result of the biennial budget submission required for the fiscal year 1992 defense budget. Section 1203 would clarify the provision in statute by permitting submission of a 6-year defense program.

FIVE-YEAR PLAN FOR THE NATIONAL FOREIGN INTELLIGENCE PROGRAM

Currently, the Secretary of Defense and the Secretary of Energy are required to submit 5-year plans for programs that fall within the national defense function. The purpose of this requirement is for the administration to present to the Congress the programs the President believes are necessary for the defense of the Nation, and to show how the administration proposes to fund these requirements within the available resources.

The committee believes the same information should be available from the Director of Central Intelligence for the national foreign intelligence program. The committee has traditionally worked closely with the Senate Select Committee on Intelligence in providing funding for intelligence programs on an annual basis. However, the committee has not had an opportunity to take the same long-term approach that it applies to the programs requested by the Department of Defense when evaluating the administration request and the recommendations of the Select Committee on Intelligence for the national foreign intelligence program.

The committee believes that it is particularly important in the current environment when defense budgets are in a period of substantial decline, and when many new demands are being placed on the intelligence budget, such as funding increases for treaty verification, human intelligence, and economic intelligence, that there be a long-range plan for the national foreign intelligence program.

Such a plan would allow the administration to present to the Congress its priorities for defense and intelligence programs in an era of fiscal constraint. Section 1204 would also ensure that the administration position has been agreed to by both the Director of Central Intelligence and the Secretary of Defense and has been fully incorporated into the 5-year defense program.

The committee expects this national foreign intelligence plan to detail the ongoing missions of the intelligence community as well as major new initiatives that are foreseen, including the number of personnel needed to fulfill these requirements. The requested expenditures in this plan must be consistent with the President's budget and with the 5-year defense program.

Also, a 5-year funding plan for intelligence activities is particularly important as a tool for developing and displaying the administration's plans to realign and streamline intelligence requirements, priorities, organizations, and programs, within available resources, as mandated by section 904.

MISSION BUDGETING

Several years ago, the committee reorganized its subcommittee structure along mission lines. This has allowed the committee to focus its review of the defense budget along policy lines, such as conventional forward-deployed alliance defenses or the ability to project power worldwide, rather than structure the committee review around accounting inputs like procurement or research and development.

In January 1990, the Secretary of Defense released a White Paper on the Department of Defense and the Congress. In the White Paper, DoD noted that if the defense debate were shifted "toward something the public might care about and understand" that Congress could "facilitate, instead of impeding, the development of a publicly supported, national consensus about strategic objectives".

A key part of the DoD recommendation was that "budget submissions should reflect missions and forces". The White Paper went on to say that "the structure can be changed if the Congress is willing. The Department is ready to consider new structures that would focus clearly on forces, missions, and regional allocation, and thus on the choices involved in defense policy".

The committee is pleased that the Department of Defense is ready to move toward a defense budget that addresses the capability that the United States receives from defense spending. The Secretary of Defense recently outlined for the Congress an illustrative 25 percent force structure reduction over 5 years. The committee believes it is important to have a clear understanding of the capabilities that the United States plans to have at the end of this 5-year period. It is clear that mission budgeting will enhance this understanding.

The current debate over where and how much to reduce U.S. defense capability and the defense budget should not take place using the limited vocabulary of accounting inputs like "Air Force aircraft procurement". The committee believes that fundamental roles and missions must be at the center of the debate over the next several years. The only way these mission issues can receive proper attention is if these distinctions are the basis of the defense budget that is submitted to Congress.

Therefore, the committee has included a provision (sec. 1205) that would require the Department of Defense to submit a budget request based on mission outputs next year, in addition to the budget request submitted in the traditional input categories. The committee is ready to work with DoD on the format for such a mission-oriented budget document.

The following are a number of specific issues which the committee urges DoD to include in the supporting documents for a mission-oriented budget:

(1) a strategic analysis that explains the implications of the budget request in terms of its impact on the mission capabilities of U.S. forces relative to those of allies and potential threat forces;

(2) for each major mission that U.S. forces may perform, a description of the forces whose primary mission lies in that

mission area, and a summary of the capabilities these forces provide at the requested level;

(3) a summary for each mission area of the annual changes in the strength and nature of such forces; in their manpower levels, readiness, and sustainability; and in the mix and relative role of active and reserve forces, and implementation of the total force concept;

(4) a projection of the annual costs of the U.S. forces in each mission area, including costs of manpower, operations, research and development, and procurement programs, showing the overall funding levels requested in the budget submission and used in the 5- or 6-year defense plan; and

(5) a summary of the resulting mix of capabilities and risks that will result if forces are funded at the requested level which takes account of the capabilities of allies and potential threat forces.

REPORT ON U.S. SECURITY ARRANGEMENTS AND COMMITMENTS WORLDWIDE

The United States is currently a party to seven collective defense treaties, both bilateral and multilateral, covering over 40 nations worldwide. As a result of this series of wide-ranging defense alliances, the United States has undertaken commitments to assist in the collective defense of these nations. In addition to these formalized commitments, the United States, as foreign policy considerations, has committed itself to the protection of the territorial integrity and sovereignty of various other nations. Most notable in this category is the State of Israel, with whom the United States does not have a defense treaty.

It is important to note that the committee recognizes that the United States has not entered into these collective defense arrangements simply to defend other nations. The United States has long employed a forward deployment strategy because such a strategy is essential to its own national security. In today's interdependent world, defense has become a global matter. Gone forever is the reliance on the doctrine of "Fortress America."

In this era of "sizing down" defense budgets and reduced force structure, the committee is concerned about the ability of the United States to meet worldwide commitments in the future. In addition, in light of the recent, unpredicted changes in the world, the committee believes that it is appropriate that a review be conducted of these various security arrangements to determine whether or not they are still necessary in the changing international environment.

Therefore, the committee recommends a provision that would direct the President to conduct a study of U.S. security arrangements and commitments worldwide. This study shall specifically include the following:

—a description of all security commitments, whether based upon a document or an expressed policy, and a recitation of the historical origins of these commitments;

—an assessment of the need to continue, or discontinue, each of these commitments, in view of the changing threat situation;

—an evaluation of the ability of the United States to meet its current commitments worldwide, based upon the projected reductions in defense structure; and

—a plan for matching each of these commitments in the future with projected force structure.

The President shall report the findings of this study to the Committees on Armed Services of the Senate and the House of Representatives no later than February 1, 1991. If the President so chooses, he may incorporate the findings of this study in the annual national security strategy report required by 50 U.S.C. 404 (a).

CONGRESSIONAL OVERSIGHT OF SPECIAL ACCESS PROGRAMS

The National Defense Authorization Act for Fiscal Years 1988 and 1989 and the Department of Defense Appropriations Act for Fiscal Year 1988 included provisions designed to improve both DoD and congressional oversight of special access programs. Subsequently, the committee, in its report on the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), directed the Secretary of Defense to report to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives whenever a change is planned in the classification of a special access program, or when classified information is to be made public concerning a special access program. This is necessary to insure proper security controls are maintained or removed. The committee noted in its report that it considered recommending a statutory provision on this matter, but determined that the procedures set forth in the report would suffice in view of the generally cooperative approach the Department had taken in the past with the committee regarding these programs. The committee specifically noted, however, that should the Department not follow these procedures, the committee would reconsider the option of legislating on this subject.

The committee has been consistent in urging the Department to permit information on special access programs to enter the public domain as soon as possible without jeopardizing national security. The committee has urged that all special access programs have a declassification plan and accompanying declassification schedule. In the past, the Defense Department often insisted on retaining information at the special access level when the committee believed a less restrictive classification level was justified. Nevertheless, the committee believes that the administration has the responsibility to establish and administer security procedures for special access programs which the Congress has little option but to follow in its oversight of those programs. Conducting oversight in this context is significantly more complicated than for programs that do not involve special access restrictions. The committee also believes, however, that the Department of Defense must be just as committed to following its own procedures if they are to have any validity.

The committee is therefore greatly disturbed by the procedures used by the Department to publicly disclose previously classified special access information during the past year. In particular, the committees were not given adequate pre-notification, or official notification after the fact, as is required in the committee report, on the release of information previously classified at the Special Access Required (SAR) level, especially concerning the B-2 Advanced Technology Bomber, the F-117A stealth fighter, and the A-12 aircraft. In addition, the committee continues to believe that the release of this information has been, in part, motivated by other than programmatic considerations given that none of these disclosures followed any plan. The Department appears to address these issues on an ad-hoc basis. The committee continues to insist that all special access classified information be released in a consistent manner and all appropriate participants in special access programs be given adequate opportunity to review and comment on the planned disclosure. Furthermore, since the committee did not receive official notification on a number of these releases, the committee has no choice but to continue to carry certain information in the special access category which creates substantial administrative burdens and a number of inconsistencies.

Accordingly, section 1212 directs the Secretary of Defense to officially report to the Committees on Armed Services and Appropriations of the Senate and the House of Representatives whenever a change is planned in the classification of a special access program of the Department of Defense, or when classified information is to be made public concerning a special access program. The report, which shall be provided to the committees not later than 14 days before the date on which the change or public announcement is to occur, shall include a description of the change, the reason for the change, and any planned public announcement related to the change. If the Secretary determines that such a change or public announcement must be made prior to the expiration of that 14-day period because of exceptional circumstances, the Secretary shall submit the report before the change or public announcement occurs, and shall include in such report the basis for the timing of the change or public announcement.

Additionally, it has come to the attention of the committee that the Secretary of Defense has interpreted provisions of section 119 of title 10, United States Code, as a rationale for denying information on certain special access programs when specifically requested by members of the Senate leadership. Section 119 requires the Secretary of Defense to submit an annual report on special access programs, as well as reports on changes to such programs. The section also establishes procedures to be followed in cases where the Secretary "waives" requirements for providing certain information if he "determines that inclusion of that information in the report would adversely affect the national security." He must, however, provide this information separately to the Chairmen of the Congressional "defense committees."

The committee has determined that section 119, as it presently exists, inappropriately excludes the Chairman and Ranking Member of the Appropriations Committees of the Senate and the House of Representatives from the requirement to be informed about special access programs "waived" from the annual report. Therefore, the committee has included in section 1212 a provision that would expand the definition of defense committees to include the Appropriations Committees of the Senate and the House of Representatives. Furthermore, the committee reiterates its belief that section 119 of title 10, United States Code, does not prohibit access of this "waived" information by the Senate leadership. The reporting requirements set forth in section 119(e) constitute only the minimum information requirements for "waived" programs and was, and is, in no way intended to establish a limit on which Members of the Senate and the House of Representatives may be provided access to such information by the Secretary of Defense.

ADDITIONAL NUCLEAR RISK REDUCTION MEASURES

On June 1, 1990, President Bush and President Gorbachev signed an important document concerning future strategic arms control negotiations. In addition to providing a broad outline for the START II negotiations, the U.S./Soviet "Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability" includes a paragraph which deals with additional nuclear confidence-building measures:

> The sides will pursue additional measures to build confidence and ensure predictability of the military activities of the United States of America and the Union of Soviet Socialist Republics that would reduce the possibility of an outbreak of nuclear war as a result of accident, miscalculation, terrorism, or unexpected technological breakthrough, and would prevent possible incidents between them.

The committee recommends that consideration be given to two "additional measures" for preventing possible nuclear incidents or accidents: parallel U.S. and Soviet reviews of their fail-safe procedures and expanded use of the Nuclear Risk Reduction Centers.

Parallel U.S./Soviet Reviews of Fail-safe Procedures

Even before the recent turmoil in the Soviet Union, the committee was concerned that some of the tens of thousands of Soviet nuclear weapons could fall into the wrong hands or be launched by accident. As reports have surfaced of actions by the Soviets to withdraw nuclear weapons from areas of ethnic unrest in Azerbaijan and elsewhere in the Soviet Union, the committee's concern has been heightened.

It has been 4 years since the Defense Department conducted a comprehensive review of U.S. nuclear control procedures and fail-safe mechanisms. The committee notes that in its 1990 Joint Military Net Assessment, the Joint Chiefs of Staff concluded that with the recent changes in the global security environment, "the risk of nuclear deterrence failing is assessed to be low and at this moment to be decreasing." However, the committee has also received testimony from the intelligence community that the Soviet Union has continued a vigorous and broad-based strategic offensive and defensive modernization effort that is improving its overall capabilities. The Soviet strategic program is a matter of continued serious concern and remains the paramount threat to U.S. national security, particularly in light of the unpredictable domestic events taking place in the Soviet Union.

Nonetheless, there is reason to believe that the prospect that U.S. nuclear weapons might have to be employed have lessened, which may afford an opportunity to reconsider past reluctance to utilize certain positive control measures, such as the installation of permissive action links (PALs) on U.S. nuclear weapons at sea and the installation of post-launch destruct mechanisms on U.S. ICBMs and SLBMs. In the latter case, this would require the development of appropriate security measures to protect the integrity of such a system.

Accordingly, the committee believes that U.S. methods and procedures in handling nuclear weapons should be thoroughly reviewed by qualified experts who are not part of the nuclear chain of command—an outside, professional, knowledgeable review. Although the Defense Department has expressed skepticism as to the need for a new, independent U.S. review, the committee believes that the situation in the Soviet Union is sufficiently worrisome, that it is in the U.S. interest, in the allies' interest, and in the Soviets' interest for the Soviets to review their control procedures for nuclear weapons. The committee has recommended a provision that would express the sense of the Senate that the President should invite the Soviet Union to join with the United States in conducting separate but parallel top-to-bottom reviews of their respective nuclear control procedures and fail-safe mechanisms.

Expanded Roles for Nuclear Risk Reduction Centers

The committee also believes serious consideration should be given to expanding the roles and functions of the Nuclear Risk Reduction Centers (NRRCs). The U.S./Soviet agreement establishing the Nuclear Risk Reduction Centers was signed on September 15, 1987, and the NRRCs began operations on April 1, 1988. There have already been three additions to the original functions of the NRRCs:

—The United States and the Soviet Union agreed that the Centers would be assigned the responsibility for handling all inspection notifications under the INF Treaty and the two pending treaties on nuclear testing, the Threshold Test Ban Treaty (TTBT) and the Peaceful Nuclear Explosions Treaty (PNET).

—The two sides agreed to use the Centers to pass messages related to the operations of the INF compliance body—the Special Verification Commission (SVC). This has included using the NRRCs to schedule meetings of the SVC and to make inquiries to the Soviets concerning suspected violations of the Treaty, such as leaving SS–20's on launchers while in transit.

—The United States and the Soviet Union agreed to have the Centers make the required notifications under the Ballistic Missile Launch agreement signed by President Reagan and General Secretary Gorbachev at the Moscow Summit in May 1988.

The committee believes that the administration should consider a number of possible options for additional roles that could be taken on by the Centers:

1. *Anticipating Nuclear Terrorist Scenarios*

Using the Centers as the locus for discussions between the two countries on responding to possible nuclear terrorist scenarios was considered in the initial discussions on the Centers' functions between Senators Nunn and Warner and the Reagan administration in 1985. However, the Reagan administration maintained that such discussions would lead to actual contingency planning and that would require exchange of intelligence information. However, given recent indications that the executive branch may be more receptive to the concept of sharing some information with the Soviet Union to better combat terrorism, this option for the Centers should be reconsidered.

2. *Taking on Other Arms Control Notification Responsibilities*

Serious consideration is being given to assigning the NRRCs the responsibility for all inspection and monitoring notifications which will be required under the START Treaty. Since the NRRCs are already handling the INF inspection notifications and are slated to take on the TTBT/PNET notifications as well, there would be obvious advantages to giving them this responsibility for other arms control agreements, including START and chemical weapons (CW).

However, a possible drawback needs to be examined: Would these additional notification responsibilities so dominate the functioning of the Centers that they would become almost exclusively a communications channel rather than the focal point for discussions and other activities aimed more generally at the problem of crisis prevention? In Senator Nunn's and Senator Warner's original conception, the Centers were to function as multi-faceted organizations; that is, as communications centers and as centers for talks on military doctrine, nuclear terrorist scenarios, and other risk reduction areas. Unfortunately, this broader conception of the Centers' role in the crisis prevention area appears to have been lost. For example, 97 percent of the Centers' workload is now comprised of INF notifications.

If the NRRCs are to take on duties related to the implementation of additional arms control agreements, consideration must be given to what must be done to make sure these activities do not further remove the Centers from responsibilities in areas more directly relevant to risk reduction. In addition, consideration must be given to the proper role, if any, for the NRRCs related to the SVC or other arms control compliance forums.

3. *Expanded Roles Under the 1971 Accidents Measures Agreement*

One of the current functions of the Centers is to implement notifications required under the 1971 Accident Measures Agreement. However, the September 15, 1987 agreement establishing the NRRCs appears to limit their role to only Article 4 of the 1971 agreement, which deals with required notifications of ballistic missile launches. The 1987 NRRC agreement does not designate the Centers as the conduit for communications under Article 5 of the 1971 agreement, which reads as follows:

> Each Party, in other situations involving *unexplained nuclear incidents,* undertakes to act in such a manner as to reduce the possibility of its actions being misinterpreted by the other Party. In any such situation, each Party may inform the other Party or request information when, in its view, this is warranted by the interests of averting the risk of outbreak of nuclear war. (emphasis added)

Had the Centers been in operation at the time of the Chernobyl nuclear accident, and had the Centers been tasked with responsibility for implementing notifications under this article of the 1971 Accidents Measures Agreement, the Soviets could have used the Centers to let the United States know that there had been a nuclear reactor accident and that that was the cause for the unexplained radiation. However, there is no mention of using the Centers for notifications of "unexplained nuclear incidents" in the text of the 1987 NRRC agreement. Thus the Parties are free to use slower communications channels for such notifications, including "diplomatic channels."

An illustration of the problems this creates is last year's accident involving the Soviet "Mike"-class submarine off Norway. Since the submarine was on fire and armed with nuclear torpedoes, the NRRCs would have been an ideal channel for promptly informing the United States pursuant to Article 5 of the 1971 agreement that there was no threat of a nuclear detonation. This notification would have been consistent with Article 3 of the Protocol to the 1987 agreement establishing the NRRCs, which states that each Party may, "at its own discretion as a display of good will and with a view to building confidence," transmit communications other than the ballistic missile launch notifications required under Article 1. Unfortunately, the Soviets did not use the NRRCs for such a notification; nor did the United States use the NRRCs to query the Soviets as to what was going on. Instead, the Soviets delayed informing Norway and other nations and then only used routine diplomatic channels.

4. *Restricting Nuclear, Chemical, and Missile Proliferation*

The Bush administration has been considering ways to institutionalize Soviet-American cooperation in the area of preventing missile proliferation to the Third World. The two countries also have mutual interests in restricting the proliferation of chemical and nuclear weapons. It may be that there are meaningful roles which the Centers could play in these areas.

5. *High-level Military Exchanges*

The August 1985 agreement between Senators Nunn and Warner and the White House on the functions of the NRRCs specified that the Centers should function as the "meeting place for high-level military exchanges . . . and other discussions that would promote a dialogue on nuclear doctrines, forces and activities." In large measure, this concept has been overtaken by events, as first Admiral Crowe and then Secretary Carlucci initiated direct "home and home" meetings with their Soviet counterparts.

While it would obviously make no sense to try to subordinate the enormously successful military to military contacts to the Nuclear Risk Reduction Centers, consideration should be given as to whether there might not be some types of military-to-military discussions which should appropriately use the NRRCs. For example, one option would be to have the Centers sponsor the meetings of the Joint Military Commission which is established under the Agreement on Preventing Dangerous Military Activities (PDMA) that

Admiral Crowe and General Moiseyev, the Chief of the Soviet General Staff, signed last year.

Another option would be to utilize the NRRCs for military-to-military dialogues on regional security concerns. In particular, the committee believes that such a dialogue regarding Northeast Asia should be explored, to include discussions on doctrine, forces, and activities in this region. In addition, this dialogue should also focus on appropriate confidence-building measures, such as broadening the 1989 PDMA agreement to include Japan, China, and the two Koreas.

6. *Relationship to CFE or Other Multinational Centers*

The Warsaw Pact's proposed package of confidence-building measures for the Negotiations on Confidence- and Security-Building Measures (CSBMs) includes "establishment of a center for the reduction of the risk of war and prevention of surprise attack in Europe which could have an informational and consultative character." In addition, various proposals have been advanced for multinational risk reduction or verification centers in the context of the negotiations on Conventional Armed Forces in Europe (CFE), the Conference on Security and Cooperation in Europe (CSCE), or the United Nations. Consideration must be given to the relationship between the U.S./Soviet NRRCs and any future multinational risk reduction or verification centers which may be established pursuant to multinational negotiations.

REPORT ON ADDITIONAL NUCLEAR CONFIDENCE-BUILDING MEASURES

The committee has included a provision (sec. 1213) that would direct the President to submit not later than March 1, 1991 a report on additional measures for improved nuclear confidence-building measures. The measures to be evaluated shall include the options discussed in this section for expanded NRRC roles, as well as two other possible measures for lessening the likelihood of accidental or unauthorized nuclear use: installation of permissive action links (PALs) on all U.S. nuclear weapons, including those deployed at sea, and installation of post-launch destruct devices on ICBMs and SLBMs.

RECIPROCAL LOGISTIC SUPPORT

Section 2342 of title 10, United States Code, authorizes the Secretary of Defense to conclude cross-servicing agreements with NATO member countries, NATO subsidiary bodies, and such non-NATO countries as the Secretary may designate. These agreements set out the terms by which the parties furnish logistic support, supplies, and services to each other's military forces.

The authority provided by section 2342 is helpful in enhancing international military cooperation and in avoiding costly duplication of logistic services. However, it is subject to geographic limitations that diminish its usefulness. For example, cross-servicing agreements with NATO member countries and NATO subsidiary bodies may only provide for reciprocal support of U.S. and foreign forces that are actually deployed in Europe and adjacent waters. Therefore, the benefits of this support cannot be realized when forces of the United States and a NATO ally jointly participate in exercises or other deployments in an area outside of Europe, such as the Middle East.

To maximize the benefits of cross-servicing agreements, the committee recommends a provision that would delete the geographic restrictions of section 2342. In this way, the committee hopes to encourage allied and friendly nations to expand their military cooperation with the United States in areas outside of their immediate vicinity.

EMIGRE RESEARCH

The committee recommends a provision that would initiate a program to support research and analysis of developments in the Soviet Union, Eastern Europe and related countries by qualified emigres residing in the United States. The committee believes that during the current period of historic changes in the Soviet Union and in the countries presently and formerly allied to it, the United States needs the best available analysis of the significance of these changes for U.S. national security interests. Emigres from such countries, particularly emigres who held official positions in them, are well qualified to provide the needed analysis.

The committee recognizes that excellent research and analysis on communist affairs is conducted within the U.S. Government as well as in academic institutions. The committee believes, however, that this work should be supplemented with research and analysis by emigres who are not full-time employees of the U.S. Government and are not established in academic institutions. Nonetheless, they possess unique knowledge and understanding of trends in their former homelands and hence can offer unique insights as to the significance of such trends. The committee therefore authorizes a grant of $600,000 to be made by the Secretary of Defense to an appropriate nonprofit organization to support study of the Soviet Union and its present and former allies by qualified emigres residing in the United States. The committee recommends that the Secretary of Defense make the grant through competitive procedures to a nonprofit organization that is experienced in overseeing advanced research on the Soviet Union and Eastern Europe.

NAVAL ARMS CONTROL REPORT

The Subcommittee on Projection Forces and Regional Defense held two hearings on the subject of naval arms control. At the first hearing, the subcommittee heard testimony from Marshal Sergei Akhromeyev, former Chief of the Soviet General Staff and now principal arms control adviser to President Mikhail Gorbachev. At the second hearing, there was testimony from a panel of senior Administration witnesses: Chief of Naval Operations Admiral Carlisle Trost, Arms Control and Disarmament Agency Director Ambassador Ronald Lehman, and Assistant Secretary of Defense (International Security Policy) Stephen Hadley.

These hearings concentrated on three areas of naval arms control that may offer the possibility of enhancing U.S. security interests and reducing the likelihood of war. The first is the possibility of limits or a ban on naval tactical nuclear weapons. A second area of naval arms control explored in the hearings was possible bilateral U.S.-Soviet limits on nuclear attack submarines.

The third possible area of naval arms control is the development of naval confidence-building measures (CBMs). This is the area in which the most progress has already been made. The 1971 Incidents at Sea Agreement, the 1986 Stockholm Accord, and the 1989 Prevention of Dangerous Military Activities Agreement all contain important naval CBMs that reduce the risk of accidental conflict. Additional CBMs may be possible, although care must be taken not to introduce unacceptable limits on the ability of our Navy to perform its essential missions. For example, one area for additional CBMs suggested at the hearings would be further publication of defense spending and program information by the Soviet Union, including such information as announcing long range defense funding projections and plans for building naval warships. The committee urges the Government of the Soviet Union to begin publishing this sort of information, as was promised by Marshall Akhromeyev at the hearing.

Although the administration, and particularly the Navy, have strongly opposed any naval arms control measures beyond CBMs, the committee would like to receive further information on the possible contributions that broader naval arms control initiatives could make to U.S. national security interests. Accordingly, the committee directs the Secretary of Defense, in consultation with the Director of the Arms Control and Disarmament Agency, to submit a report on the costs and benefits of pursuing the three areas of naval arms control described above, as well as any additional naval arms control measures that the agencies believe should be evaluated. The report should include:

(1) An assessment of the impact on U.S. security, both positive and negative, of the three naval arms control areas outlined above.

(2) An assessment of the likelihood that the various concepts could be negotiated with the Soviet Union and any other affected nations.

(3) An assessment of how effectively verifiable each proposal would be.

The report shall be submitted to the Committees on Armed Services of the Senate and the House of Representatives not later than February 1, 1991 in an unclassified, and if necessary, classified form.

IMPACT OF RELEASING EXCESS BALLISTIC MISSILES

In response to the release of a request for proposals (RFP) from the National Aeronautics and Space Administration for small expendable space launch vehicles, contractors have contacted the Navy about the potential availability of Poseidon sea-launched ballistic missiles and facilities as the basis for a response to the RFP. The Navy has formally indicated that there are sufficient numbers of such missiles which are excess to Government needs to support the requirements reflected in the RFP. The Navy announced that such missiles could be made available to industry as Government

Furnished Equipment (GFE) subject to established procedures and as permitted by arms control agreements.

It appears that the prospective START accord will incorporate a U.S. proposal to permit each side to "destroy" sea-launched ballistic missiles and intercontinental ballistic missiles in excess of the START limits by using them for launching spacecraft. The committee believes this is an appropriate use of such assets and supports initiatives to reduce the cost and improve the operational responsiveness of space launch vehicles. However, the committee firmly believes that the impact of the release of significant numbers of excess Government ballistic missiles on the nascent commercial launch industry must be thoroughly understood and weighed before such release occurs. For several years, the Congress and the administration have encouraged substantial private investment in the commercial launch industry as a matter of policy. The private sector has responded, in some cases with impressive levels of investment and accomplishments. The committee believes that the issue of whether the provision of excess ballistic missiles would undermine these private sector achievements and established Government policy should be examined by the National Space Council before these missiles are released.

Accordingly, the committee urges the Secretary of Defense to refrain from permitting the transfer of ballistic missiles, for the purpose of launching objects into space, that have been determined in fiscal year 1990 or 1991 to be excess to Government needs to any agency or private interest as GFE until the National Space Council assesses and notifies the Congress of the policy implications and the economic impact on the commercial launch industry of such a release.

REPORT ON PORT SECURITY AT HAMPTON ROADS

In 1972, with the adoption of National Security Decision Memorandum (NSDM) 340, Polish merchant vessels were precluded from calling on the Port of Hampton Roads based on an assessment of fleet vulnerabilities to intelligence collection by Warsaw Pact merchant ships. The Secretary of Transportation, who has overall responsibility for such policy decisions, reaffirmed the 1972 Hampton Roads closed-port policy again in 1983, when the Navy completed a 10-year update of its original vulnerability study.

Because the 1983 Navy vulnerability study is now dated and in view of the dramatic political changes which have occurred in Eastern Europe, the committee requests that the Secretaries of Defense and Transportation jointly conduct an interagency review of the continuing validity of closing Hampton Roads to Polish merchant shipping.

As part of this review, the Navy should update its 1983 study on vulnerabilities, which should include the identification of any new equipment, operations, and security practices in the Hampton Roads area; an estimate of the number of Polish ships that would likely call on Hampton Roads were the closed-port policy terminated; alternative locations for docking and anchoring Polish merchant vessels within the port; and alternative access and inspection policies which could be used aboard such vessels.

The study should also assess the impact of greater access of Warsaw Pact diplomats and citizens to the Hampton Roads area, and their technical capability to collect intelligence regardless of the access by Polish merchant vessels. Finally, since Polish merchant vessels were regular carriers at Hampton Roads prior to 1972, when East-West relations were at a low ebb, the report should summarize the security measures that were in effect prior to 1972, identifying those which could be usefully applied to today's vastly changed situation.

Finally, as part of this review, the intelligence community, joined by Coast Guard Intelligence, should provide a thorough threat assessment of the current and future capability, practices, and likelihood of Polish merchant vessels to conduct espionage at Hampton Roads, as well as the U.S. ability to detect such activity.

The Secretaries of Defense and Transportation shall report to the Committees on Armed Services of the Senate and the House of Representatives the results of this review no later than 6 months after the enactment of this bill.

In requesting such a report, the committee does not intend to indicate one way or the other its position on the policy issue. Clearly, it wishes to ensure that U.S. security is not compromised by a precipitous change in policy. On the other hand, where security concerns have changed, the old policy may no longer be justified. The study required here should lay a solid foundation for determining whether a change of policy is justified and, if so, what security precautions should accompany such change.

TITLE XIII—ELIMINATION AND MODIFICATION OF REPORTS REQUIRED BY LAW

In 1986, the committee initiated section 602 of the Goldwater-Nichols Department of Defense Reorganization Act to terminate many reports that were required by law from the Defense Department. In particular, section 602 repealed all recurring reporting requirements that were in law before October 1, 1986, except for 149 reports that were specifically cited in the section. The joint statement of the managers estimated that section 602 reduced the number of defense reports required from the President and the Defense Department by about two-thirds of the total.

In order to determine whether any more reporting requirements should be terminated, section 602 of the Goldwater-Nichols Act directed the Secretary of Defense to compile a comprehensive list of all recurring defense reports (including those repealed by section 602); to assess their utility and administrative burden; and to recommend whether each report should be retained, modified, or repealed.

The material that the Secretary of Defense submitted to the Congress in April 1987 was incomplete and confusing. It actually recommended that many of the hundreds of reports repealed by the Goldwater-Nichols Act should be revived. Moreover, of the 149 reporting requirements that the Goldwater-Nichols Act continued, the Defense Department proposed that only 11 be terminated. The committee re-examined those 11 reports in light of this DoD recommendation and confirmed the need to retain them.

In February 1990, the Department of Defense forwarded to the Congress a formal legislative proposal that would repeal 60 and modify 11 reporting requirements. Of these reporting requirements, only 54 that would be repealed and 7 that would be modified are within the jurisdiction of the committee. In response to this proposal, the House of Representatives has passed a bill (H.R. 4736) that would terminate 59 reports and reduce the frequency and administrative burden of an additional 11 reports.

The committee has carefully reviewed both the Defense Department legislative proposal and H.R. 4736. Like the Defense Department and the House Committee on Armed Services, the committee believes that many reporting requirements are no longer necessary. They divert the personnel and funds of the Defense Department from truly important activities. Therefore, the committee recommends a title of this bill that would repeal 73 and modify 10 recurring reporting requirements. These requirements are now found in titles 10, 32, and 37 of the United States Code; annual defense authorization acts; and other acts of law.

Part A of the title would repeal or modify reporting requirements that were either continued by the Goldwater-Nichols Act or enacted into law after the date of enactment of the Goldwater-Nichols Act.

Part B of the title would clarify the status of several reporting requirements that the Goldwater-Nichols Act intended to terminate. Because the Act did not change or delete the provisions of law that required the reports intended to be repealed, their status has been uncertain. Part B would clarify their standing by actually eliminating them from the law.

SUMMARY OF REPEALED OR MODIFIED REPORTS

	Citation	Topic	Action
1.	10 USC 113(i)	Technology transfer funds	Repeal
2.	10 USC 115(b)(4)	Deferral of end strength limitation	Repeal
3.	10 USC 117	NATO readiness	Repeal
4.	10 USC 128(d)	Physical protection of nuclear material	Modify frequency
5.	10 USC 402(d)	Transportation of humanitarian supplies	Modify frequency
6.	10 USC 662(b)	Joint duty promotion compliance	Modify frequency
7.	10 USC 673(b)	Involuntary recall of reservists	Repeal
8.	10 USC 836(b)	Courts-martial rules and regulations	Repeal
9.	10 USC 1051(e), (f)	DoD personnel expenses for developing countries	Repeal
10.	10 USC 2006(e)(3)	DoD Education Benefits Fund	Repeal
11.	10 USC 2113(j)(2)	Health Sciences University arrangements with Jackson Foundation	Repeal
12.	10 USC 2208(k)	Working-capital funds	Repeal
13.	10 USC 2215(a),(d)	Unobligated funds	Modify frequency
14.	10 USC 2216	Variances to offset inflation	Repeal
15.	10 USC 2307(d)	Advance payments over $25 million	Repeal
16.	10 USC 2313(c)	GAO review of foreign contracts	Repeal
17.	10 USC 2324(e)(2)(B), (C)	Allowable costs	Repeal
18.	10 USC 2349	NATO cross-servicing agreements	Repeal

19.	10 USC 2357	R&D contracts over $50,000	Repeal
20.	10 USC 2359	Contract research center compensation	Repeal
21.	10 USC 2362(c)	Testing of armored vehicles	Repeal
22.	10 USC 2365(c)	Competitive prototyping notification	Repeal
23.	10 USC 2388(d)	Liquid fuels contracts	Repeal
24.	10 USC 2394(b)(2)	Energy or fuel contracts	Repeal
25.	10 USC 2394a(b)(2)	Solar energy studies	Repeal
26.	10 USC 2401(b)	Long-term lease of ship or plane	Repeal
27.	10 USC 2401(e)	Lease or purchase of ship or plane	Repeal
28.	10 USC 2404(d)	Waiver of laws for petroleum procurement	Repeal
29.	10 USC 2431(b)	Supplemental report on weapon procurement	Repeal
30.	10 USC 2438*	Alternative competitive sources	Repeal
31.	10 USC 2455	Cataloging and standardizing supplies	Repeal
32.	10 USC 2457(d)	NATO standardization of equipment	Modify frequency
33.	10 USC 2463(b)	Savings from increased use of civilians	Repeal
34.	10 USC 2547(d)	Excess non-lethal supplies to State	Repeal
35.	10 USC 2662(b)	Real property transactions under $200,000	Raise threshold
36.	10 USC 2672a(b)	Land acquisition not in MilCon act	Repeal
37.	10 USC 2721(b)	Records of fixed property and stored supplies	Repeal
38.	10 USC 2779(b)(4)	Foreign exchange fluctuations - military construction	Repeal
39.	10 USC 2805(b)(3)	Minor relocation construction	Repeal
40.	10 USC 2822(b)(4)	No-cost acquisition of family housing	Repeal

41.	10 USC 2823(b)	Disagreements over availability of housing	Repeal
42.	10 USC 2834(b)	State Department leases for overseas housing	Repeal
43.	10 USC 2853(d)(3)	MilCon scope of work or cost changes	Expedite approval
44.	10 USC 2854(b)	Repairs and replacements in excess of minor MilCon projects	Repeal
45.	10 USC 2856(b)	Regulations on barrack space	Repeal
46.	10 USC 2864(b)	Military construction contracts on Guam	Repeal
47.	10 USC 4314	Army Master's degrees	Repeal
48.	10 USC 6956(a)	Vacancies at Naval Academy	Repeal
49.	10 USC 7217	Navy prior-year appropriations	Repeal
50.	10 USC 7308(c)	Transfer of obsolete vessels	Repeal
51.	10 USC 7309(b)	Construction in foreign shipyards	Repeal
52.	10 USC 7434	Naval Petroleum Reserves production	Modify frequency
53.	22 USC 2321h(e)	Overseas war reserves	Repeal
54.	32 USC 314(d)	National Guard abstracts	Repeal
55.	37 USC 301a(e)	Aviation career incentive pay	Repeal
56.	37 USC 301c(e)	Submarine duty incentive pay	Repeal
57.	37 USC 303a(c)	Special pay for health professionals	Repeal
58.	37 USC 306(f)	Unusual duty pay	Repeal
59.	37 USC 308b(e)	Selected Reserve reenlistment bonuses	Repeal
60.	37 USC 308c(e)	Selected Reserve enlistment bonuses	Repeal
61.	37 USC 310(d)	Hostile fire/imminent danger pay	Repeal
62.	37 USC 312b(c)	Bonuses for naval nuclear propulsion training	Repeal
63.	37 USC 312c(d)	Bonuses for naval nuclear propulsion service	Repeal

64.	37 USC 1008(a)	Adequacy of pay and allowances	Repeal
65.	50 USC 451 et seq.	Defense industrial reserves	Repeal
66.	50 USC 1431	Emergency procurement authority	Repeal
67.	50 USC App. 468(a)	Priority orders for defense	Repeal
68.	50 USC App. 468(h)(2)	Steel requirements for defense	Repeal
69.	P.L. 91-441, sec. 203*	Independent R&D	Repeal
70.	P.L. 94-106, sec. 808	Changes in 5-year ship construction	Repeal
71.	P.L. 96-418, sec. 802(e)	MX and Trident community assistance	Repeal
72.	P.L. 98-94, sec. 1260	Offshore drilling effects on naval operations	Repeal
73.	P.L. 98-115, sec. 803(b)(2)	Waiver of foreign pre-fab construction requirement	Repeal
74.	P.L. 98-525, sec. 1002(d)(2)	NATO military capability	Expand flexibility
75.	P.L. 98-525, sec. 1003(c)	Allied burdensharing	Extend preparation time
76.	P.L. 99-145, sec. 106(a)(2)	NATO cooperative program agreements	Repeal
77.	P.L. 99-145, sec. 913(b)	Procurement competition goals	Repeal
78.	P.L. 99-145, sec. 915	Should cost analysis for major programs	Repeal
79.	P.L. 99-661, sec. 1207(g)(4)(B)	Failure of minority contractors to meet requirements	Repeal
80.	P.L. 100-180, sec. 112(c)	Certification for land-based tanker aircraft	Repeal
81.	P.L. 100-180, sec. 1201(e)	Change in notice of transfer authorization	Repeal
82.	P.L. 100-456, sec. 317(c)	Obligation of funds for civilian personnel	Repeal
83.	P.L. 101-189, sec. 852(b)	Foreign contracts and intellectual property	Repeal

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*These reporting requirements would be repealed by sections 805 and 815 of the bill.

TITLE XIV—GUARD AND RESERVE INITIATIVE

The past year has witnessed remarkable developments that have far reaching consequences for U.S. security policy. Without question, the most profound change in the threats confronting U.S. security in the last year has been the virtual elimination of the threat of a large-scale Warsaw Pact attack against Western Europe. Three separate factors have contributed to this development:

—the increase in warning time—now estimated by some DoD officials to exceed 2 years;

—the Soviet and Warsaw Pact unilateral reductions begun in 1989 and scheduled for completion before 1991; and

—the disintegration in recent months of the Warsaw Pact as a warfighting coalition.

In addition, the emerging NATO/Warsaw Pact arms reduction agreement on Conventional Armed Forces in Europe (GTE) will, if successfully concluded, make the threat of a Soviet attack on Western Europe even more remote.

While the changes in the Soviet conventional threat have been most dramatic in the European theater, there have also been important developments in Soviet naval activity. Submarine and surface deployments have been scaled back dramatically. Naval aviation activity has been similarly curtailed. Most Soviet naval activity is now limited to home waters, leading Admiral Kelso, the Chief of Naval Operations, to conclude that the Soviet fleet has adopted a defensive doctrine. Obviously these operating patterns can be reversed, but such a change would take years and could be clearly observed.

These fundamental changes in the threat now permit a fundamental change in the strategy for dealing with the new threat. With increased warning times, it is possible to adopt fundamentally new approaches to fielding conventional forces.

STRATEGIC SHIFT TO EMPHASIZE RESERVE FORCES

Since 1973 the United States has maintained a Total Force Policy. That policy called for the effective integration of active duty and Reserve components into a combined force. The perception that conventional war could occur with extremely little warning led the military Services and civilian policy makers to place most of the "tooth" in the Active components, while the Reserve components were largely given "tail" or support functions. Reserve combat units were routinely given the oldest and least capable equipment. The Air Force was an important exception, where a substantial percentage of combat capability was assigned to Air Force Reserve and Air National Guard units.

The substantially greater warning times and the need to preserve as much combat capability as possible during this period of budgetary austerity require a greater dependence on reserve forces. Reserve forces are clearly able to shoulder a greater share of the burden in light of the changes that have occurred in warning time.

COMMITTEE GUARD/RESERVE FORCES INITIATIVE

The committee recommends a comprehensive set of legislative proposals to strengthen the National Guard and Reserve components in light of the decision to enhance utilization of these forces. These proposals fall into the general categories of force structure, management of reserve forces, and general modernization.

FORCE STRUCTURE

The amended fiscal year 1991 budget request is not based on a fundamental reassessment of the threat and the development of a new strategy. Rather, the Services have generally adopted a "share the pain" approach to meeting lower funding levels. Reserve forces are being cut back proportionally with reductions in active duty forces. This is most apparent in the area of force structure.

The committee recommends a series of proposals to address this problem. In general terms, these provisions would:

—freeze reserve component force structure at current levels;
—direct the Military Departments to undertake a 5-year plan to strengthen reserve units and balance them with the capabilities and resources of active units; and
—direct the increase of Reserve component participation in certain mission areas.

The committee devoted special attention to the need to strengthen the Navy Reserve. While the problems confronting the Navy in the use of reservists is perhaps greater than those for other Services, the Navy clearly has not devoted sufficient attention and resources to its Reserve component.

The committee notes that, in response to questions for his confirmation hearing, the Chief of Naval Operations stated that, "I intend to find ways to increase reserves which will be trained and available after mobilization. With greater warning time, we will have more time to bring ships out of reserve status." His answer went on to describe what some have called a "nesting" concept which would have several ships partially manned by active crews to train reservists, but not the level of manning needed to take the ships to sea on short notice.

The committee is particularly interested in having the Navy fully explore such alternatives, but proposes no directive legislation this year on the basis of Admiral Kelso's commitment that the Navy will explore all promising options. The committee will be interested in monitoring the Navy's studies and looks forward to receiving periodic progress reports.

MANAGEMENT OF RESERVES

The committee recommends several provisions that would improve the management of reserve forces. The most important element of this improved management is to enhance the integration of Active and Reserve components. The reserves have tended to have a better understanding of and appreciation for active duty forces than the reverse case. The committee believes that the Department must find ways of improving Active component understanding of and appreciation for reserve forces. To that end, the committee recommends a 3-year phased process of introducing active duty personnel into reserve forces to replace the current dependence on full time reservists.

MODERNIZATION OF RESERVE FORCES

As noted above, reserve units are uniformly given older, less capable equipment. In some instances that equipment is tactically obsolete. The committee recommends a series of budgetary additions to the National Guard and Reserve Equipment appropriation account and includes provisions directing the deactivation of certain older, obsolete systems.

PRESERVATION OF CURRENT RESERVE COMPONENT FORCE STRUCTURE

During extensive hearings, the committee learned that the Military Departments are contemplating reductions in Reserve force structure, often strictly because of a "share the pain" philosophy on the part of the Services. The committee rejects this approach. The committee has concluded that the Defense Department is facing a fundamental period of change that will place greater emphasis on the use of National Guard and Reserve forces. This is especially the case in flying units where National Guard and Reserve units have virtually the same capabilities as active duty counterpart units. The committee is convinced that placing greater emphasis on National Guard and Reserve forces is a key strategy for dealing with the change in the threat while conserving in the face of tighter budgets the talent and skill that has been developed in active forces over the past decade.

Consequently, the committee recommends a provision (Sec. 1411) that would preserve the National Guard and Reserve force structure through fiscal year 1991 at the equivalent level that existed on January 1, 1990. The provision does not prohibit the normal and orderly modernization of equipment as signed to reserve units.

"ROBUSTING" AIR NATIONAL GUARD AIR FORCE RESERVE UNITS

For years, the Air Force has consistently assigned fewer aircraft to reserve squadrons than to active duty squadrons. While in some limited instances this reflects demographic constraints in certain geographical areas, hearings and analysis revealed that the consistent, systematic pattern of assigning fewer aircraft to reserve units reflected an informal policy to maintain an artificial balance between active and reserve numbers. The committee rejects this approach, especially at a time when national strategy will place greater emphasis on Reserve forces.

Detailed analysis shows that existing Air National Guard and Air Force Reserve units could operate an additional 270 fighter, airlift, and tanker aircraft within existing force structure. The committee believes this so-called "robusting" concept is the most cost-effective way of preserving combat capability during a period of reduced budgetary resources. In the long run, robusting offers the potential to save substantial resources, well over $1 billion over the next 5 years.

The committee recommends a provision (sec. 1412) that would require the Secretary of the Air Force to transfer aircraft from the active Air Force to reserve units to correct the imbalance and bring reserve units to full strength. The committee understands that 72 fighter aircraft, 32 transport aircraft, and 26 tanker aircraft could be transferred and absorbed within existing reserve units starting in fiscal year 1991.

To realign funding to carry out the transfers in fiscal year 1991, the committee adjusted the amended budget request for operations and maintenance as follows:

	Millions
Operations and Maintenance, Air Force	-$67
Operations and Maintenance, Air Force Reserve	+18
Operations and Maintenance, Air National Guard	+53

The committee understands that there may be additional military construction expenses, but those costs cannot be identified until actual units are selected and final plans delineated. The committee would welcome a reprogramming request to address those military construction costs when they are known.

MODERNIZING NAVY RESERVE MARITIME PATROL SQUADRONS

In hearings this year, the Navy confirmed that there has been a substantial reduction in Soviet submarine activity. This reduction permits a greater concentration of P-3 resources in reserve units. The Navy Reserve already makes a substantial contribution in the maritime patrol mission, with 35 percent of the P-3 fleet operated in reserve units. This percentage can increase in the face of the change in Soviet submarine activity.

At the same time, the Navy confirmed that the Soviet submarine shipbuilding program is continuing. The new generation of substantially quieter submarines makes the early model P-3B aircraft operated by Navy Reserve squadrons increasingly obsolete.

The committee concludes that it is appropriate to address both developments by increasing the number of P-3C model aircraft in the Navy Reserve. At the same time, the committee believes that Navy Reserve VP squadrons should have the same number of aircraft as active duty squadrons.

Consequently, the committee recommends a provision (sec. 1413) that would direct the Secretary of the Navy to issue the same number of aircraft to Navy Reserve squadrons as to active duty squadrons, and to transfer 80 P-3C aircraft from active to reserve squadrons by September 30, 1996. (Another provision in this title prohibits the Navy from deactivating any Navy Reserve maritime patrol squadrons.) In light of the committee actions in this area, the Navy should reconsider any plans to realign or transfer existing P-3 squadrons in the Navy Reserve.

To realign funding to carry out this transfer in fiscal year 1991, the committee adjusted the budget request for operation and maintenance as follows:

	Millions
Operation and Maintenance, Navy	-$49
Operation and Maintenance, Navy Reserve	+4.4

The committee understands that there might be additional costs associated with refurbishing and transferring support equipment from deactivated Navy squadrons to Navy Reserve squadrons. The committee welcomes a reprogramming request to pay for those costs once they are identified.

ASSIGNING THE TACTICAL AIRLIFT MISSION TO THE RESERVE COMPONENTS

The Air Force has done a better job of implementing the Total Force Policy than have the other Military Departments. Over half of the Air Force's tactical airlift capabilities are found in Air National Guard and Air Force Reserve units.

Despite this considerable achievement, it is clear that the Air Force considers the tactical airlift mission to be a second- or third-level priority. The Air Force has no plans to modernize its tactical airlift fleet until well into the next century, despite the fact that its current inventory averages 25 years in age. During the next 10 years, the Air Force plans to spend $20-30 billion on a next-generation fighter, $15-20 billion on a next-generation strategic transport aircraft, $20 billion on space boosters, $5-8 billion on air-to-air missiles, and so forth. The Air Force has not budgeted anything to modernize tactical airlift squadrons.

By contrast, the Air National Guard and Air Force Reserve consider tactical airlift one of their premier missions. Air Force reservists fly tactical airlift missions every week of the year. They routinely support overseas deployments, and have consistently worked to update and modernize their tactical airlift fleet.

The committee concludes that proponency for the tactical airlift mission currently falls to the Reserve components in practice. The committee recommends that this be formalized, and has included a provision (sec. 1414) that would direct the Secretary of Defense to assign the tactical airlift mission to the Air Force Reserve and the Air National Guard. The provision would also direct the Secretary of the Air Force to develop a plan for transferring all tactical airlift transport aircraft to reserve squadrons by September 30, 1992. The committee understands that this will necessitate the activation of additional squadrons.

The committee understands that the Air Force believes that reserve units cannot respond as quickly as can active duty units if emergencies arise. The committee believes that this problem can be addressed by assigning a certain number of active duty personnel to reserve squadrons, consistent with initiatives in the Manpower and Personnel titles of the bill.

REPLACEMENT OF OV-1 AND OV-10 AIRCRAFT WITH A-10 AIRCRAFT

The committee understands that the Air Force is retiring a large number of its old obsolete observation aircraft and replacing them with A-10 close air support aircraft. The committee believes this is a cost-effective plan, in that it removes obsolete forces while expanding the usefulness of the A-10, which would retain its close air support capabilities.

The committee notes that the Army and the Marine Corps have a significant number of equally aged observation aircraft. The committee believes that those aircraft are just as vulnerable and hard to support as are the old observation aircraft in the Air Force. Rather than procure new observation aircraft, the committee believes that the Air Force should transfer A-10 aircraft to the Army and Marine Corps.

Consequently, the committee recommends a provision (sec. 1415) that would direct the Army and Marine Corps to deactivate their fleet of observation aircraft over the next 5 years, and the Air Force to transfer A-10 aircraft as replacements. Since the Air Force will continue to operate the largest number of A-10s, it is directed to provide ongoing training, support, and depot maintenance for all of the Services' OA-10 fleets.

SENSE OF CONGRESS ON IRR MUSTER

The committee recommends a provision (sec. 1421) that would express the sense of the Congress supporting an annual muster of the Army Individual Ready Reserve (IRR). In 1985, the Congress required a muster test of the Army IRR. The following year, the Department of Defense required by policy that all members of the Individual Ready Reserve who had not recently completed active service or were not close to the end of their military obligation would physically report on an annual basis to confirm their immediate availability for service and to reinforce their understanding of their continued military membership. In 1989, the Congress authorized a new "muster duty" to provide an additional authority to the Secretary of Defense under which members of the Individual Ready Reserve could be called up for 1 day each year without their consent. A new flat rate allowance for such duty was also authorized to ease administration. With the drawdown of active forces, the committee believes this program is more important than ever to support the rapid expansion of U.S. Armed Forces in the event of war or national emergency.

RESERVE OBLIGATION FOR MEMBERS RECEIVING TRANSITION ASSISTANCE

The committee recommends a provision (sec. 1422) that would require members who receive transition assistance, including separation pay, under the provisions added by this act or existing law, as a condition of that assistance, to become or remain a member of a Reserve component for 3 years from the date of their separation or from the end of any existing service obligation.

As active military forces are reduced in light of the diminished threat, the importance of maintaining trained manpower in our Reserve components becomes even greater as a hedge against a deterioration in the world situation. The committee believes that its recommendation will provide an infusion of high quality, trained manpower from the active force into the Reserve components, and also provide separating active force personnel with opportunities to serve in the Reserve components as the active forces build down.

DESIRABILITY OF 2-YEAR DUTY IN RESERVES FOR PROMOTION

The committee recommends a provision (sec. 1423) that would require the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by April 15, 1991 on the desirability of requiring the assignment of 2 years of active duty in support of the reserves as a prerequisite for promotion above the grades of lieutenant colonel or Navy commander in the Active component. The committee notes that in 1948 a Department of Defense committee recommended that all regular officers serve at least one tour (and not their last tour) with a Reserve component.

ASSIGNMENT OF CERTAIN RESERVE MEMBERS TO ROTC ACTIVITIES

The committee recommends a provision (sec. 1424) that would prohibit the assignment of members paid from National Guard or Reserve personnel appropriations to ROTC units effective on October 1, 1992. The justification of estimates for the President's budget for fiscal year 1991 indicates that, out of the total request for 8,129 officers to be on full-time duty to support the Reserve components of the Army, 314 Army Reserve officers and 293 Army National Guard officers will be used in ROTC units. The Department of Defense has reported that, although the ROTC program does provide officers for immediate utilization in Selected Reserve units, the duties of the 607 officers do not require Reserve component expertise and could be performed by Active component members.

EXTENSION OF AUTHORITY FOR RESERVE MEDICAL BONUS

The committee recommends a provision (sec. 1425) that would extend the test of a reserve medical bonus through September 30, 1992. Section 613 of the National Defense Authorization Act for Fiscal Year 1989 authorized a geographically limited test of a bonus for critically short wartime physician and nurse specialties. The Department of Defense was somewhat slow in setting up the parameters for this test; therefore, the results which the Department reported for fiscal year 1989 were inconclusive. The committee understands the incomplete results for fiscal year 1990 show a very positive response from individuals in critical nursing specialties.

MEDICAL SPECIAL PAY FOR RESERVISTS

The committee recommends a provision (sec. 1426) that would authorize reserve medical officers performing inactive-duty training to receive medical special pay for each period of such duty performed. This recommendation addresses difficulties in attracting and retaining certain medical specialists in the reserves.

BENEFITS FOR MEMBERS OF THE RESERVE

The committee recommends a provision (sec. 1427) that would authorize reservists who have completed all requirements for receipt of retired pay at age 60, but who are no longer in the Selected Reserve, and their dependents to use the commissary stores on the same basis as participating Selected Reservists. Currently, members of the Selected Reserve and their dependents are authorized to use the commissary stores of the Department of Defense once each month and whenever they are serving on active duty. Reservists who have completed all requirements for receipt of retired pay at age 60, but who are no longer in the Selected Reserve, and their dependents are not authorized commissary use until they reach age 60. The committee believes that this situation contributes to the reluctance of some members with long service to leave the Selected Reserve. The committee's recommendation corrects this situation.

The committee's recommendation would also require that the Secretary of Defense issue regulations which provide participating Selected Reservists, reservists who have completed the service necessary to qualify for retired pay at 60, and the dependents of both to use the exchange stores of the Department of Defense and all revenue generating nonappropriated fund activities.

Finally, recognizing that many revenue generating nonappropriated fund activities are likely to be less used as active forces drawdown, the committee recommendation would require that the Secretary of Defense issue regulations to authorize members of the Individual Ready Reserve in good standing access to these facilities. The Secretary would have authority to limit access for this category as necessary to ensure the best operation of the nonappropriated fund activities.

PRESIDENTIAL AUTHORITY TO MOBILIZE MEMBERS OF THE RESERVE COMPONENTS

Under current law (10 U.S. Code 673b), the President has the authority to mobilize up to 200,000 members of the Selected Reserve for operational missions for 90 days. This period may be extended by the President for an additional 90 days. The President can exercise this authority without declaring a national emergency.

This call up authority has never been used. Presidents have been reluctant to use this authority, and the Defense Department and the military Services have been reluctant to recommend that they exercise this authority. The political reluctance to selectively mobilize the reserves has led military planners justifiably to question the accessibility of forces that depend on Reserve component units and personnel.

As the Defense Department begins to place even greater reliance on the Reserve components, it is imperative that the Defense Department demonstrate its willingness and ability to ask for and use the existing Presidential authority to call up members of the National Guard and Reserves. The committee directs the Secretary of Defense to develop, during fiscal year 1991, a scenario of operational missions under which this call up authority could be exercised on a routine basis. The committee intends to review the Department's efforts in this area during hearings on the fiscal year 1992–1993 defense authorization request.

P-1 LINE	ITEM	Amended FY 1991 Request Quantity	Amended FY 1991 Request Amount	Senate Change to Request Quantity	Senate Change to Request Amount	Senate Authorization Quantity	Senate Authorization Amount
	NATIONAL GUARD AND RESERVE PROCUREMENT						
4	TRUCK, 5-TON	915	60,000	(915)	(60,000)		
6a	ARMY RESERVE EQUIPMENT CONSOLIDATION				213,800		213,800
	MH-53 MINESWEEPERS			12	281,900	12	281,900
16a	NAVY RESERVE EQUIPMENT CONSOLIDATION				119,000		119,000
19	AH-1W COBRA AIRCRAFT			8	79,000	8	79,000
	AH-1W COBRA PRIOR YEAR			[6]	[58,600]		
20a	MARINE CORPS RESERVE EQUIP CONSOLIDATION				35,000		35,000
27a	AIR FORCE RESERVE EQUIPMENT CONSOLIDATION				105,600		105,600
29	UNDISTRIBUTED REDUCTION-FY1990 UNOB. BAL.				(60,000)		(60,000)
	NIGHT VISION DEVICES				35,000		35,000
	MLRS LAUNCHERS			27	60,000	27	60,000
	CH-47 HELICOPTERS			24	141,061	24	141,061
30	UH-60 HELICOPTERS			24	156,000	24	156,000
37	M113 ARMORED PERSONNEL CARRIER MODS				10,000		10,000
42a	ARMY NATIONAL GUARD EQUIP CONSOLIDATION				537,900		537,900
44	C-130 AIRCRAFT	2	48,000	10	220,100	12	268,100
54a	AIR NATIONAL GUARD EQUIP CONSOLIDATION				317,600		317,600
	TOTAL NATIONAL GUARD AND RESERVE		455,400		2,191,961		2,647,361

GUARD AND RESERVE MODERNIZATION PROPOSALS

Multiple Launch Rocket System (MLRS)

The Army has determined that its 8-inch howitzers are tactically obsolete and currently plans to remove them from active duty units by the mid-1990s. Those units will be assigned Multiple Launch Rocket System (MLRS) launchers and support equipment. Currently roughly half of the Army's inventory of 8-inch howitzers is found in National Guard and Army Reserve units, and the number will actually increase through the 1990s as 8-inch howitzers are removed from Active component units.

The committee believes that the MLRS system is especially well suited to Reserve component units and recommends that an increase of $60 million be used to purchase 27 launchers to accelerate the modernization of artillery units in the National Guard.

CH-47 Helicopter Replacements for CH-54 Helicopters

Currently only the Army National Guard operates the aging CH-54 helicopters. The age of the fleet and the small numbers of helicopters in the fleet impose a serious and expensive maintenance burden. The Army intends to replace the CH-54 helicopters with remanufactured CH-47 helicopters.

The committee believes that the Army should accelerate the replacement program. Further, the committee believes that a greater proportion of CH-47s should be operated by reserve units than is currently planned by the Army. Consequently, the committee recommends an authorization of $141.1 million for 24 remanufactured CH-47 helicopters for the National Guard, and directs the Army to proceed immediately with the deactivation of 24 CH-54 helicopters when their replacements become available. Further, the committee directs the Army to plan for the total deactivation and replacement to occur during the next 5 years.

UH-60 Helicopters

In order to facilitate the modernization of Army reserve component helicopter units, the committee recommends an authorization of $156 million for UH-60 helicopters for the Army National Guard.

C-130 Transports

For the past 15 years, the Air Force has consistently refused to budget resources to modernize tactical transports in either the Active or the Reserve components. In each of the last 13 years, the Congress has procured C-130 aircraft for Air National Guard and Air Force Reserve squadrons. As a consequence of this action, this is the one mission area where, on the average, reserve squadrons operate equipment that is equal to or somewhat better than their active duty counterparts.

The committee is convinced that the Air Force considers tactical airlift a second or even third order priority. While the average C-130 in the active Air Force today is 25 years old, the Air Force has not budgeted replacement aircraft until well into the next century.

This contrasts with the Air National Guard and the Air Force Reserve which award the highest priority to modernizing their tactical airlift capabilities.

Consequently, the committee recommends a provision that would direct the Secretary of Defense to transfer the tactical airlift mission exclusively to the Air National Guard and Air Force Reserve. The provision directs the Secretary of the Air Force to transfer all C-130 aircraft to reserve squadrons over the next 5 years. In order to insure prompt availability of tactical transports in times of emergency, the Secretary of the Air Force shall insure that active duty Air Force pilots and maintenance personnel are assigned to reserve squadrons.

The committee also recommends an increased authorization of $220.1 million for 10 additional C-130 transports for the Air National Guard in fiscal year 1991.

Navy Reserve Minesweepers

The committee believes that countermine warfare is one of the most effective ways to utilize Navy Reserve personnel. The committee notes that while the Navy has initiated a modernization program for helicopters in active duty helicopter minesweeper squadrons, no comparable modernization plan is contemplated for reserve units. Consequently, the committee recommends an authorization of $281.9 million to procure 12 MH-53 helicopters to be assigned only to Navy Reserve squadrons.

Night Vision Devices

The committee notes that if the National Guard is to fight side by side with the Active components, it will require an accelerated fielding of night vision devices. In order to expedite the fielding of modern generation equipment, the committee recommends an authorization of $35 million to procure night vision devices for the Army National Guard.

M113A2 to M113A3 Upgrade

As active units are inactivated, equipment will be transferred from active units to Reserve component units. Many of the M113A2 personnel carriers which will be transferred are old and in need of upgrade. The committee recommends an authorization of $10 million to convert M113A2 to M113A3 for the National Guard as they are transferred from active to reserve units.

AH-1W Helicopters for Marine Corps Reserve

As noted elsewhere in this report, the committee believes that all of the Services need to procure lighter, more lethal equipment. The Marine Corps, for example, has decided to replace its inventory of 465 M60 tanks with 215 M1A1 tanks. The committee believes that this is a constructive development. Nonetheless, the committee also believes that the Marine Corps should increase its anti-armor capability to complement the smaller number of tanks.

Consequently, the committee recommends an authorization of $79 million to procure 8 AH-1W helicopters for the Marine Corps

Reserve. The committee also recommends an authorization of the six AH-1W helicopters appropriated in fiscal year 1990 which were not authorized at the time. Altogether, these 14 helicopters are sufficient to replace the aging helicopters in one of the existing Marine Corps Reserve attack helicopter squadrons. The committee directs the Marine Corps to budget resources in the future to modernize its reserve attack helicopter squadrons.

REDISTRIBUTION OF EQUIPMENT FROM ACTIVE TO RESERVE UNITS

The committee recognizes the increasing role that reserve forces will have in the Nation's future defense posture. The committee also recognizes that greater utilization of reserve forces will be unnecessarily impeded if equipment shortages persist.

The committee anticipates that substantial amounts of new equipment will be made available to the National Guard and Reserve components over the next several years as the number of active units is reduced. This transfer of equipment should substantially improve the readiness and combat potential of reserve forces.

To date, the Department of Defense has not been able to provide the Congress with information on the likely transfers of equipment to the Reserve components from active units that are being inactivated. That information will be crucial for long-term planning on the future modernization needs of the Reserve components. Therefore, the committee directs the Department to submit a report, concurrent with the next budget submission, which identifies the plans to redistribute equipment from active units to reserve units over the next 6 years.

EXAMINATION OF ALTERNATIVE AH-64 FIELDING CONCEPTS FOR GUARD/RESERVE UNITS

The Army developed a Single Station Unit Fielding Training (SSUFT) concept for fielding the new AH-64 helicopter in Army aviation battalions. An attack helicopter battalion would temporarily move to Ft. Hood, Texas, where the pilots would learn to fly the helicopter, the maintenance technicians would learn to maintain the helicopter, and all equipment required to support the new battalion would be assembled. This new fielding approach has proven to be extremely successful and has served as a model for unit training and conversion.

While this concept has been very successful for active duty personnel, it has proven to be difficult for Army National Guard and Army Reserve units to undergo the conversion and training process. The SSUFT approach requires 90 days of tactical training at Ft. Hood, which is difficult for reserve personnel to accomplish.

By contrast, when an Air National Guard or Air Force Reserve squadron is scheduled to undergo conversion to new weapon systems, the new hardware, training personnel, and support equipment are delivered to the unit for conversion and training at the location of the reserve unit. This approach is less demanding on reserve personnel.

The committee believes the Army should examine such an approach for use in training its reserve aviation battalions, now that the bulk of active Army battalions will have completed conversion to the AH-64 helicopter.

DIVISION B—MILITARY CONSTRUCTION AUTHORIZATIONS

The purpose of Division B is to provide military construction authorization and related authority in support of the Military Departments during fiscal year 1991. The administration's request is reflected in S. 2172 as introduced by Senators Nunn and Warner. This division as approved by the Committee on Armed Services totals $8,552,778,000 in authorization for appropriations in fiscal year 1991.

This authorization provides construction in support of the military Services, Guard and Reserve components, Defense Agencies, NATO Infrastructure, and military family housing requirements.

A brief summary of the fiscal year 1991 authorization follows:

	Amended FY1991 Request	Senate Change	Senate Authorized
Summary:			
Total Military Construction, Army	774,900	(64,980)	709,920
Total Military Construction, Navy	1,113,300	(24,174)	1,089,126
Total Military Construction, Air Force	1,364,200	(349,066)	1,015,134
Total Military Construction, Defense Agencies	787,500	(128,187)	659,313
NATO Infrastructure	420,400	(210,000)	210,400
Total Milt. Construction, Army National Guard	66,400	109,547	175,947
Total Milt. Construction, Air National Guard	66,500	58,030	124,530
Total Milt. Construction, Army Reserve	59.300	9,526	68,826
Total Milt. Construction, Navy Reserve	50,200	17,007	67,207
Total Milt. Construction, Air Force Reserve	37,700		37,700
Base Realignment And Closure	916,500	50,000	966,500
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Total Military Construction	5,656,900	(532,297)	5,124,603
Total Family Housing, Army	1,554,450	2,500	1,556,950
Total Family Housing, Navy	904,500	(21,375)	883,125
Total Family Housing, Air Force	971,900	(10,000)	961,900
Total Family Housing, Defense Agencies	21,100		21,100
Total Homeowner's Assistance	5,100		5,100
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Total Family Housing	3,457,050	(28,875)	3,428,175
Total Military Construction/Family Housing	9,113,950	(561,172)	8,552,778
Component Totals:			
Army	2,334,450	(62,480)	2,271,970
Navy	2,017,800	(45,549)	1,972,251
Air Force	2,336,100	(359,066)	1,977,034
Defense Agencies	1,725,100	(78,187)	1,646,913
NATO Infrastructure	420,400	(210,000)	210,400
Guard and Reserve	280,100	194,110	474,210
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Total Military Construction/Family Housing	9,113,950	(561,172)	8,552,778

COMMITTEE ACTION, FISCAL YEAR 1991

The committee authorized the Department's military construction program at approximately $561 million below the requested level. The most significant deferrals involved:

—three quarters of the overseas military construction.

—half of the requested contribution to the NATO Infrastructure program.

—construction for basing of the Rail Garrison MX and A-12 systems, and reduction of construction at the initial B-2 base.

The committee made the following adjustments to the Department's fiscal year 1991 military construction request:

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		MILITARY CONSTRUCTION CHANGES:			
		---------------- Army ----------------			
ALABAMA	ANNISTON ARMY DEPOT	Ammunition Demilitarization Facility,PhI	54,300	(40,400)	13,900
CALIFORNIA	FORT ORD	Water Distribution System (Phase I)	7,400	(7,400)	
GEORGIA	FORT GORDON	Soldier Service Center		10,600	10,600
INDIANA	FORT BENJAMIN HARRISON	Entomology Facility		570	570
LOUISIANA	FORT POLK	Maintenance Complex		22,000	22,000
UTAH	TOOELE ARMY DEPOT	Ammunition Demilitarization Facility	11,800	40,400	52,200
GERMANY	GIESSEN	Tank Crew Combat Course	2,250	(2,250)	
GERMANY	GRAFENWOEHR	Applied Instruction Facility	5,700	(5,700)	
GERMANY	GRAFENWOEHR	Ready Building	3,500	(3,500)	
GERMANY	HEILBRONN	Hardstand & Wash Facility	5,500	(5,500)	
GERMANY	HOHENFELS TNG AREA	Education Center Addition	610	(610)	
GERMANY	HOHENFELS TNG AREA	Hardstand & Maintenance Sheds	4,350	(4,350)	
GERMANY	HOHENFELS TNG AREA	Library Addition	550	(550)	
GERMANY	HOHENFELS TNG AREA	Military Police Station Addition	1,300	(1,300)	
GERMANY	HOHENFELS TNG AREA	Physical Fitness Training Center	3,350	(3,350)	
GERMANY	MANNHEIM	Vehicle Maintenance Sheds	7,600	(7,600)	
GERMANY	VILSECK	Chapel Center/Religious Education Fac	3,300	(3,300)	
GERMANY	VILSECK	Fire Station	1,250	(1,250)	
GERMANY	VILSECK	Hardstand/Tactical Equip Shop & Sheds	8,500	(8,500)	
GERMANY	VILSECK	Multi-Purpose Auditorium Facility	2,550	(2,550)	
JAPAN	JAPAN VARIOUS	Ammunition Storage	8,400	(8,400)	
JAPAN	JAPAN VARIOUS	Ammunition Surveillance Facility	2,050	(2,050)	
KOREA	CAMP CASEY	Barracks	8,690	(8,690)	
KOREA	CAMP GARY OWEN	Tactical Equipment Shop	1,800	(1,800)	
KOREA	CAMP HOVEY	Tactical Equipment Shop	8,500	(8,500)	
KOREA	KOREA VARIOUS	Ammunition Storage	11,000	(11,000)	

		Total Military Construction, Army		(64,980)	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		---------------- Navy ----------------			
CALIFORNIA	BRIDGEPORT	Safety/Modernization		11,300	11,300
CALIFORNIA	LONG BEACH NAVAL SHIPYARD	Asbestos Removal Shop	500	(500)	
FLORIDA	ORLANDO NAVAL TRAINING CENTER	Mess Hall	7,070	(7,070)	
GEORGIA	KINGS BAY NAVAL SUBMARINE BASE	Community Impact Assistance		10,278	10,278
KENTUCKY	LOUISVILLE NAVAL ORDNANCE STATION	Phalanx Shop Modernization	5,660	(5,660)	
WASHINGTON	BREMERTON PUGET SOUND NAVAL SHIPYARD	Land Acquisition		20,000	20,000
WASHINGTON	WHIDBEY ISLAND NAVAL AIR STATION	Operations & Maintenance Trnr Fac (Incr I)	19,100	(19,100)	
ICELAND	KEFLAVIK NAVAL AIR STATION	Fuel Facilities	2,440	(2,440)	
ICELAND	KEFLAVIK NAVAL COMMUNICATION STATION	Communication Center	10,248	(10,248)	
ITALY	SIGONELLA NAVAL AIR STATION	Corrosion Control Hangar	8,390	(8,390)	
ITALY	SIGONELLA NAVAL AIR STATION	Engine Maintenance Shop Addition	1,850	(1,850)	
JAPAN	HANZA OKINAWA NAVAL SECURITY GROUP ACT	Fire Protection System	1,035	(1,035)	
JAPAN	IWAKUNI MARINE CORPS AIR STATION	Hangar Conversion	3,017	(3,017)	
UNITED KINGDOM	LONDON PERSONNEL SUPPORT ACTIVITY	Pay And Personnel Support Office	442	(442)	
WORLDWIDE VARIOUS	LAND ACQUISITION	Land Acquisition	10,660	(6,000)	4,660

		Total Military Construction, Navy		(24,174)	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		-------------- Air Force --------------			
ALASKA	ELMENDORF AFB	Dormitory		8,900	8,900
ARIZONA	LUKE AFB	Land Acquisition	1,800	(1,800)	
ARIZONA	WILLIAMS AFB	Auxiliary Field/Land Acquisition	5,500	(5,500)	
ARKANSAS	LITTLE ROCK AFB	Personnel Processing Center		5,300	5,300
COLORADO	FALCON AFS	Milstar Communications Ground Terminal	710	(710)	
COLORADO	PETERSON AFB	Milstar Communications Ground Terminal	1,350	(1,350)	
FLORIDA	CAPE CANAVERAL AFS	Lease Acquisition		2,953	2,953
ILLINOIS	SCOTT AFB	Dormitory		7,900	7,900
INDIANA	GRISSOM AFB	Add/Alter Child Development Center		2,000	2,000
KANSAS	MCCONNELL AFB	Enlisted Dorm		9,100	9,100
LOUISIANA	BARKSDALE AFB	Vehicle Maintenance Complex		6,300	6,300
LOUISIANA	BARKSDALE AFB	Peacekeeper-Add To Communications Fac	730	(730)	
LOUISIANA	BARKSDALE AFB	Peacekeeper-Add/Alter Integ Maint Fac	2,150	(2,150)	
LOUISIANA	BARKSDALE AFB	Peacekeeper-Garrison Facilities	56,150	(56,150)	
LOUISIANA	BARKSDALE AFB	Peacekeeper-Missile Ops Maint Facility	3,050	(3,050)	
LOUISIANA	BARKSDALE AFB	Peacekeeper-Road Railroad And Utilities	7,600	(7,600)	
LOUISIANA	BARKSDALE AFB	Peacekeeper-Training Train Shelter	2,800	(2,800)	
MAINE	LORING AFB	Munitions Support Equipment Storage Fac	830	(830)	
MISSOURI	WHITEMAN AFB	Add To And Alt Physical Fitness Center	3,600	(3,600)	
MISSOURI	WHITEMAN AFB	B2-Add To And Alter Child Dev Ctr	750	(750)	
MISSOURI	WHITEMAN AFB	B2-Add To/Alt Base Library/Ed Ctr	3,500	(3,500)	
MISSOURI	WHITEMAN AFB	B2-Add/Alt Chapel Community Activity Ctr	1,700	(1,700)	
MISSOURI	WHITEMAN AFB	B2-Aircraft Maintenance Docks	8,700	(8,700)	
MISSOURI	WHITEMAN AFB	B2-Dormitory	6,500	(6,500)	
MISSISSIPPI	COLUMBUS AFB	Upgrade BOQ		2,700	2,700
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Add To And Alt Comm Maint Fac	50,000	(50,000)	
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Add To Communications Fac	800	(800)	
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Land Acquisition	1,000	(1,000)	
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Missile Ops/Integ Maint Fac	5,500	(5,500)	
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Road Railroad And Utilities	7,900	(7,900)	
NORTH DAKOTA	GRAND FORKS AFB	Peacekeeper-Training Train Shelter	3,000	(3,000)	
SOUTH CAROLINA	SHAW AFB	Upgrade Sewage Treatment Plant		3,000	3,000
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Add/Alter Comm Maint Fac	990	(990)	
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Garrison Facilities	73,000	(73,000)	
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Land Acquisition	1,000	(1,000)	
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Missile Ops Maint Facility	6,900	(6,900)	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Road Railroad And Utilities	11,200	(11,200)	
WASHINGTON	FAIRCHILD AFB	Peacekeeper-Training Train Shelter	3,750	(3,750)	
WYOMING	FE WARREN AFB	Peacekeeper-Dormitory	5,200	(5,200)	
GERMANY	BITBURG AB	Add To Physical Fitness Center	2,000	(2,000)	
GERMANY	HAHN AB	Upgrade Water Stor And Distr Sys	4,300	(4,300)	
GERMANY	MARIENFELDE	Upgrade Operations Facility	1,621	(1,621)	
GERMANY	RHEIN-MAIN AB	Communications Control Center	3,250	(3,250)	
GERMANY	SPANGDAHLEM AB	Add/Alter Water Storage And Distrib Syst	4,900	(4,900)	
GERMANY	SPANGDAHLEM AB	Upgrade Sewage Treatment Plant/Sewer Sys	4,350	(4,350)	
HONDURAS	LA MESA AB	Airfield Improvements	12,600	(12,600)	
HONDURAS	PALMEROLA AB	C130-Aircraft Apron	4,600	(4,600)	
ITALY	GHEDI AIRFIELD	Alter Munitions Storage Facility	550	(550)	
ITALY	RIMINI AIRFIELD	Alter Munitions Storage Facility	510	(510)	
ITALY	SAN VITO AS	Alter Dormitory	2,750	(2,750)	
JAPAN	KADENA AB	Control Tower Cab	770	(770)	
KOREA	KUNSAN AB	Acft Fuels Sys Repr Dock	3,300	(3,300)	
KOREA	KUNSAN AB	Physical Fitness Complex	5,300	(5,300)	
KOREA	KUNSAN AB	Squadron Operations Facility	6,000	(6,000)	
KOREA	KUNSAN AB	Upgrade Electrical Dist System-Phase III	5,700	(5,700)	
KOREA	OSAN AB	Base Operations Facility	1,950	(1,950)	
KOREA	OSAN AB	Fire Station	4,650	(4,650)	
KOREA	OSAN AB	Replace Taxiway Pavement-Phase I	5,500	(5,500)	
PHILIPPINES	CLARK AB	Control Tower Cab	710	(710)	
TURKEY	INCIRLIK AB	Alter Munitions Storage Facility	3,700	(3,700)	
TURKEY	INCIRLIK AB	Water Distribution Mains	1,100	(1,100)	
UNITED KINGDOM	HIGH WYCOMBE	Dormitory	4,200	(4,200)	
UNITED KINGDOM	RAF ALCONBURY	Add To And Alter Physical Fitness Center	3,200	(3,200)	
UNITED KINGDOM	RAF ALCONBURY	Alter Dormitories	4,100	(4,100)	
UNITED KINGDOM	RAF BENTWATERS	Central Post Office	1,500	(1,500)	
UNITED KINGDOM	RAF LAKENHEATH	Alter Dormitory	3,155	(3,155)	
UNITED KINGDOM	RAF LAKENHEATH	Alter Munitions Storage Facility	4,950	(4,950)	
UNITED KINGDOM	RAF MILDENHALL	Add To And Alt Physical Fitness Center	1,100	(1,100)	
OVERSEAS CLASSIFIED	OVERSEAS CLASSIFIED	Operations Facility	14,243	(14,243)	
OVERSEAS CLASSIFIED	OVERSEAS CLASSIFIED	Tactical Intelligence Center	3,000	(3,000)	
		Total Military Construction, Air Force		(349,066)	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		------------ Defense Agencies ----------			
CALIFORNIA	DEFENSE LANGUAGE INSTITUTE - MONTEREY	Outdoor Athletic Facilities	2,168	(2,168)	
GEORGIA	FORT BENNING	Elementary School		7,900	7,900
GEORGIA	FORT BENNING	Add/Alter Elemantary School		1,500	1,500
HAWAII	TRIPLER ARMY MEDICAL CENTER	Alter Family Practice Clinic		2,200	2,200
VIRGINIA	DAHLGREN NAVAL SPACE SURVEILLANCE SYS	Add/Alter School		1,360	1,360
CONUS CLASSIFIED	CLASSIFIED LOCATION	Building Add W Support Facilities	27,425	(825)	26,600
CONUS CLASSIFIED	CLASSIFIED LOCATION	Classified Project	5,375	(5,375)	
GERMANY	DARMSTADT	Elem/Jr High Additions	7,276	(7,276)	
GERMANY	FRANKFURT	Atterbury Elem School Addition	7,449	(7,449)	
GERMANY	GIESSEN	Dispensary/Dental Clinic Replacement	5,000	(5,000)	
GERMANY	IDAR OBERSTEIN	Elementary School Addition	2,189	(2,189)	
GERMANY	KAISERSLAUTERN	Elem, Jr, & HS Additions	13,341	(13,341)	
GERMANY	LANDSTUHL	Elem/Middle School Addition	3,724	(3,724)	
GERMANY	MANNHEIM	High School Addition	8,708	(8,708)	
GERMANY	WELLINGEN	Elementary School Addition	3,187	(3,187)	
GERMANY	NUERNBERG	Dispensary/Dental Clinic Replacement	5,800	(5,800)	
GERMANY	RAMSTEIN	Elementary & Jr High Additions	12,217	(12,217)	
ITALY	AVIANO AIR BASE	Second Echelon Medical Logistics Storage	1,100	(1,100)	
ITALY	VICENZA	Hospital Replacement	28,000	(28,000)	
KOREA	KUNSAN AIR BASE	Hospital/Dental Clinic Replacement	14,400	(14,400)	
UNITED KINGDOM	HARROGATE	Menwith Hill Ms Addition	2,100	(2,100)	
UNITED KINGDOM	RAF EDZELL	Medical Dental Clinic Rpmt	5,400	(5,400)	
UNITED KINGDOM	ROYAL AIR FORCE LANARK	Fleet Hospital Facility 14	3,900	(3,900)	
OVERSEAS CLASSIFIED	OVERSEAS CLASSIFIED	Classified Project	1,600	6,200	7,800
OVERSEAS VARIOUS	VARIOUS LOCATIONS	Hot Lunch Facilities	15,188	(15,188)	
		Total Military Construction, Defense Agencies		(128,187)	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		--------- Army National Guard ----------			
ALABAMA	BREWTON	Armory		903	903
ALABAMA	MARION	Armory		764	764
ARKANSAS	CAMP ROBINSON	Dormitory		6,950	6,950
ARKANSAS	CAMP ROBINSON	Battalion Support Complex		4,025	4,025
CONNECTICUT	CAMP O'NEILL	Dorm/Dining Facility		2,900	2,900
FLORIDA	TALLAHASSEE	Armory Addition	721	479	1,200
ILLINOIS	WOODSTOCK	Armory		1,597	1,597
IOWA	CAMP DODGE	STARC		9,398	9,398
IOWA	CAMP DODGE	Access Road, Phase I		3,200	3,200
IOWA	COUNCIL BLUFFS	Armory		2,115	2,115
INDIANA	KNOX	Aviation Facility		3,050	3,050
KANSAS	SALINA	Training Site Development		1,667	1,667
LOUISIANA	NEW ORLEANS	Armory		3,628	3,628
NORTH DAKOTA	FARGO	Reserve Center		7,700	7,700
NEW MEXICO	ESPANOLA	Armory		1,600	1,600
NEW MEXICO	PORTALES	Armory		1,600	1,600
NEW MEXICO	RIO PUERCO	Armory		3,400	3,400
NEW MEXICO	RIO PUERCO	Organizational Maintenance Shop		1,950	1,950
NEW MEXICO	RIO PUERCO	Utilities/Infrastructure		2,127	2,127
NEW MEXICO	SANTA FE	Organizational Maintenance Shop		850	850
OHIO	MUSKINGHAM COUNTY	Land Acquisition		5,670	5,670
OKLAHOMA	CAMP GRUBER	Training Facilities, Phase III		3,332	3,332
OREGON	MONMOUTH	Military Education Facility		4,060	4,060
OREGON	PENDLETON	Armory		1,542	1,542
SOUTH CAROLINA	GREENVILLE	Armory		2,500	2,500
SOUTH CAROLINA	GREENVILLE	Organizational Maintenance Shop		1,800	1,800
SOUTH CAROLINA	PICKENS	Armory		2,000	2,000
SOUTH CAROLINA	FOUNTAIN INN	Armory		2,000	2,000
SOUTH CAROLINA	GREENWOOD	Armory		2,000	2,000
VIRGINIA	WOODSTOCK	Armory		1,493	1,493

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
WASHINGTON	TACOMA	Pier Acquisition		2,900	2,900
WISCONSIN	RICHLAND CENTER	Armory & Vehicle Storage		1,000	1,000
WEST VIRGINIA	CHARLESTON	Armory		2,900	2,900
WEST VIRGINIA	KINGWOOD	Organizational Maintenance Shop		1,100	1,100
WEST VIRGINIA	PARKERSBURG	Organizational Maintenance Shop		900	900
WEST VIRGINIA	CAMP DAWSON	Phase IV		2,500	2,500
WYOMING	CAMP GUERNSEY	Airfield Improvements		2,947	2,947
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	4,100	9,000	13,100
		Total Milt. Construction, Army National Guard		109,547	
		---------- Air National Guard ----------			
ALASKA	KULIS ANGB	Base Supply Warehouse		4,300	4,300
CONNECTICUT	EAST GRANDLEY	Land Acquisition		1,900	1,900
FLORIDA	CAMP BLANDING	Civil Engineering Maintenance Facility		2,500	2,500
FLORIDA	CAMP BLANDING	Vehicle Maintenance		1,000	1,000
KANSAS	FORBES AIRPORT	Utilities Upgrade		1,140	1,140
KENTUCKY	STANDIFORD FIELD	Aircraft Apron & Taxiway		3,900	3,900
MINNESOTA	MINNEAPOLIS IAP	Regional Simulator		3,000	3,000
MINNESOTA	MINNEAPOLIS IAP	Medical/Dining Facility		3,700	3,700
MISSISSIPPI	GULFPORT	Comm/Elect. Training Facility		2,300	2,300
MISSISSIPPI	GULFPORT	Add/Alter Base Engineering Facility		490	490
MISSISSIPPI	THOMPSON FIELD	Medical/Security Police Facility		1,300	1,300
MISSISSIPPI	THOMPSON FIELD	Base Civil Engineering Facility		1,500	1,500
NEVADA	RENO IAP	Medical/Dining Facility		2,400	2,400
WEST VIRGINIA	YEAGER	Operations & Training Facility		12,100	12,100
WISCONSIN	GENERAL MITCHELL IAP	Aircraft Maintenance Hangar		4,700	4,700
WISCONSIN	VOLK FIELD	Reconstruct Apron & Taxiway		4,100	4,100
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	8,800	7,700	16,500
		Total Milt. Construction, Air National Guard		58,030	

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		-------------- Army Reserve ------------			
INDIANA	SOUTH BEND	Alter Armory		397	397
PENNSYLVANIA	JOHNSTOWN	Army Res/Marine Corps Res Aviation Fac		1,300	1,300
WEST VIRGINIA	CHARLESTON	USARC/OMS		5,000	5,000
WEST VIRGINIA	VARIOUS LOCATIONS	Land Acquisition		1,829	1,829
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	4,756	1,000	5,756
		Total Milt. Construction, Army Reserve		9,526	
		-------------- Navy Reserve ------------			
ILLINOIS	GLENVIEW NAVAL AIR STATION	Aircraft Intermediate Maintenance Facility		10,400	10,400
ILLINOIS	GLENVIEW NAVAL AIR STATION	Transmitter/Receiver Building		640	640
VERMONT	BURLINGTON	Reserve Center		2,500	2,500
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Planning And Design	3,885	3,467	7,352
		Total Milt. Construction, Navy Reserve		17,007	
WORLDWIDE UNSPECIFIED	BASE REALIGNMENT AND CLOSURE ACCOUNT	Base Realignment And Closure	916,500	50,000	966,500
WORLDWIDE UNSPECIFIED	NATO INFRASTRUCTURE	NATO Infrastructure	420,400	(210,000)	210,400

State	Installation	Project	Amended FY1991 Request	Senate Change	Senate Authorized
		FAMILY HOUSING CHANGES:			
		---------- Army Family Housing ---------			
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Maintenance Of Real Property	540,210	2,500	542,710
		Total Family Housing, Army	1,554,450	2,500	1,556,950
		---------- Navy Family Housing ---------			
BERMUDA	NAVAL AIR STATION	New Construction (Family Housing Office)	378	(378)	
CALIFORNIA	MARINE CORPS BASE CAMP PENDLETON	New Construction (116)	11,805	(11,805)	
NEVADA	FALLON NAS	New Construction (80)		10,500	10,500
NEW YORK	NAVAL STATION NEW YORK	New Construction (150)	19,692	(19,692)	
		Total Family Housing, Navy	904,500	(21,375)	883,125
		------- Air Force Family Housing -------			
WORLDWIDE UNSPECIFIED	UNSPECIFIED WORLDWIDE LOCATIONS	Maintenance Of Real Property	326,922	(10,000)	316,922
		Total Family Housing, Air Force	971,900	(10,000)	961,900

OVERSEAS MILITARY CONSTRUCTION

The committee recommends very substantial reductions in the Department's request for military construction overseas. Of the overall military construction request of $9.13 billion, approximately 10 percent is allocated to overseas initiatives, 5 percent for construction to support U.S. deployed forces, and 5 percent for the NATO Infrastructure program. The committee recommends deferral of approximately 75 percent of the U.S. projects, and half of the request for the NATO Infrastructure program.

The committee makes these recommendations because of the substantial uncertainty regarding the size, location, and character of the United States forward deployed military presence in the years ahead. Absent any detailed plan from the Department which outlines even the European troop and installation adjustments associated with the administration's deployed force goal in this region, the committee is not in a position to support any but the most critical overseas construction projects. The committee's deferral of overseas construction parallels the Department's recent recision of approximately $300 million in overseas construction which was authorized in fiscal year 1990 and prior years.

The military construction program which was the basis for the Department's NATO Infrastructure request was based upon a strategy and force level programmed prior to recent political and arms control developments in Europe. The committee is aware that the NATO staff is currently reassessing not only the overall alliance strategy, but also future force levels and deployment locations. These reassessments are welcomed and are necessary precursors to a complete review of the construction needs which would be funded under the NATO Infrastructure program. The committee recommends authorizing half of the requested sum for this account in order to fund the reimbursement of prefinanced projects and phased payments of NATO communications systems which are already being procured and fielded.

The modest amount of construction recommended for authorization overseas supports critical intelligence activities, the fielding of new systems, and projects which have rapid paybacks. In making these deep reductions, the committee realizes that it is deferring construction initiatives which would enhance the quality of life of service families assigned to overseas locations. The committee regrets this adverse impact, but believes that this action, like the recent recisions by the Secretary of Defense, are warranted until future requirements can be developed by the Department and reviewed by the committee.

The committee looks forward to reviewing the Department's overseas deployed force and basing plans for fiscal years 1992–1997, and expects this plan to be submitted with the Department's budget request for fiscal years 1992 and 1993.

Once the long term forward deployed force and basing structure plans are known, the committee believes that the Department should embark upon a critical analysis of which units require the stability of accompanied tours, and which can be more economically fulfilled by rotational or short tour forces. It is the committee's view that in the long term, substantial numbers of U.S. overseas deployed forces will be provided austere basing which will reduce the overall cost of these deployments and could enhance the mobility of these units from their deployed sites to areas of potential conflict.

The issue of austere overseas basing will be a matter of ongoing review, and the committee recommends that the Department begin now to develop objective criteria for selecting units for various overseas basing modes. Absent a logical methodology and a complete review of long term deployed force facility needs, the committee will be unlikely to support further construction and leasing which supports accompanied tours to overseas sites.

FAMILY HOUSING IMPROVEMENTS

The committee recommends that the funding levels requested by the military Services and Defense Agencies for the improvement of military family housing be approved as requested. However, it does not authorize expenditures at certain locations as outlined in the amended budget request because the long term use of these installations is in doubt either because of announced closure studies or the overall ambiguity regarding overseas basing. The committee intends that the Services use the funds which would have been expended on these locations to fund other badly needed improvements at installations in the United States whose long term tenure is assured.

The committee defers family housing improvements which were requested at the following locations:

Army: Fort Ord, California; Giessen and Heidelberg, Germany; and Sagamihara, Japan.

Navy: NS New York; MCAS Iwakuni, Japan; NS Rota, Spain.

Air Force: Eaker AFB, Arkansas; Myrtle Beach AFB, South Carolina; Bergstrom AFB, Texas; Ramstein AB, Germany; Kadena AB, Japan; Moron AB, Spain; RAF Kemble and RAF Lakenheath, United Kingdom.

In reordering the priority of Army housing improvement projects, the committee directs that $8.5 million be allocated to the ongoing upgrade of military family housing at Fort Riley, Kansas.

RESOLUTION TRUST CORPORATION ASSETS

The committee is aware that the Federal Government controls substantial real property interests through the Resolution Trust Corporation as part of the response to the savings and loan industry's financial problems. The corporation's charter is to liquidate these assets as quickly as is prudent in protecting the taxpayers' interests and without adversely affecting the regional real estate market.

The committee is disappointed that the Department of Defense has apparently made no effort to screen these properties for potential use to meet the facility needs of the military Services. While most military facility requirements do not lend themselves to commercial or residential property, some do. In particular, requirements for commercial-type office space and unaccompanied or family housing might be met through purchase of properties controlled by the Resolution Trust Corporation.

The committee believes that the Corporation's assets merit periodic screening by the military Services. With the submission of the military construction request for fiscal years 1992 and 1993, the committee directs that such a screening be done and that the Secretary involved certify that the requirements supported by the requested construction projects could not be more economically met through the purchase of assets of the Resolution Trust Corporation or any similar entity.

MILITARY CHAPLAIN PROGRAM

The Defense Department's amended budget request included three military construction projects supporting the military chaplaincy program. The committee recommends that one of these projects at Fort Lewis, Washington, be authorized at the present time. The other two projects at Whiteman Air Force Base, Missouri, and Vilsek, Germany, would be deferred because of questions of whether the troop strength at these installations through at least the mid-1990s will justify construction of these facilities.

In making these recommendations, the committee reiterates its support for the military chaplaincy program. The program is staffed by dedicated individuals who provide extremely important support to military personnel and their families. The committee intends to favorably consider construction in support of this program in future budgets consistent with the demonstrated need for additional facilities and overall budget priorities.

FAMILY HOUSING LEASING IN FOREIGN AREAS

The Department of Defense requested that the number of family housing units authorized for lease in foreign areas be increased by 1,225, to a total of 54,000. The increase was to accommodate the needs of Navy personnel stationed in Spain, Italy, England, and Japan.

The committee recommends that the current cap on leased units be retained. In light of the prospective reduction of U.S. military personnel from overseas areas, the committee does not believe it timely to increase the number of leased units, a cap which was substantially increased last year. The committee does believe that the Navy has a valid need for an increased lease authority, and directs the Department of Defense to adjust the allocation of lease points among the Services over the next 3 years to meet this need.

As the future overseas force levels and beddowns become known, the committee expects that the Department will closely review its need for the current number of overseas family housing leases and provide the committee this analysis.

KOREAN HOST NATION SUPPORT

The committee is aware that the Government of South Korea has entered into a memorandum of agreement with United States Forces, Korea to pay all the costs of relocating U.S. military functions from their current site in central Seoul to an outlying location.

The committee agrees that this is an appropriate financial arrangement for a substantial and disruptive relocation which is occurring for the convenience of Korean domestic interests, not for any military purpose. The committee is concerned, however, that the costs of this extensive relocation might absorb limited host nation support funds which the Korean Government would otherwise provide to U.S. forces for more direct military support functions.

For some years, the committee has urged the Department of Defense to negotiate a more generous host nation support agreement with the Government of South Korea. For the most part, this direction has failed to provide a substantial increase in the level of host nation support, primarily because the Government of Korea has represented that it was unable to increase its support.

It is the committee's view that the willingness of the United States forces to relocate from Seoul ought to be conditioned on not only full cost reimbursement, but also on an increasing level of host nation support beyond the scope of this relocation plan.

TITLE XXI—ARMY

NAVAJO PROVING GROUND, ARIZONA

The 1988 Defense Secretary's Commission on Base Realignment and Closure recommended the closure of the Army's Navajo Depot Activity near Flagstaff, Arizona, and the transfer of this installation to the Arizona National Guard.

The committee is concerned that in implementing this action, the Department of Defense has encountered obstacles to securing for the National Guard long term rights to use this land.

The committee encourages the United States Forest Service, which licenses the right to operate the complex, the U.S. Army, and the Arizona National Guard to work together to resolve the legal issues necessary to enable the National Guard to operate the installation on a long term basis. The committee directs the Secretary of the Army to provide a progress report on these negotiations to the Armed Services Committees of the Senate and the House of Representatives no later than January 1, 1991.

FORT SHERIDAN, ILLINOIS

In its report accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee voiced concern regarding the planned disposal of portions of Fort Sheridan, Illinois. The committee was concerned that the residual portion of the post be large enough to accommodate Reserve component units in the Chicago area which are now on the post or are currently in expensive leased facilities. It was also the committee's hope that Active component units which, under the recommendations of the Commission on Base Realignment and Closure, would remain in the area, would not be imprudently relocated off the post into expensive leased quarters. Finally, the committee was concerned that valuable military family housing on Fort Sheridan be reviewed for possible retention to support residual DoD activities.

The committee is pleased that the Army and Navy have conducted good faith negotiations to retain substantial portions of the post's family housing stock to support residual military activities in the area, and that the Army has been able to develop plans to expand the number of reserve units which can be served by the Reserve component enclave on the post.

The committee remains concerned that the Army's plans for the support of active duty units which will remain in the Chicago area have not provided cost-effective options. Prior to relocating these units from Fort Sheridan, the Army is directed to provide the committee a report which analyzes all facility options for these units, to include any legislation needed to implement them.

CHEMICAL DEMILITARIZATION PROGRAM

The committee recommends a provision (sec. 2105) that would amend the military construction authorization for a chemical demilitarization plant at Tooele Army Depot, Utah, which was contained in the National Defense Authorization Act for Fiscal Year 1989. Because of continuing design changes and additional environmental and safety features being incorporated in the prototype facility at Johnston Atoll, the Tooele facility has experienced a substantial cost growth and program slippage. For these reasons, the fiscal year 1989 authorization would be increased by $40.4 million, to a total of $90 million. In a separate action elsewhere in the bill, the committee recommends that phase 2 of this project be authorized for appropriation in fiscal year 1991 at $40.4 million.

In a related provision, the committee recommends that the chemical demilitarization facility requested by the Army for Anniston Army Depot, Alabama, be increased in scope from $54.3 million to $82.9 million, and phased over 2 years, beginning with $13.9 million in fiscal year 1991.

LIVE AGENT CHEMICAL TRAINING

The committee applauds the recent chemical weapons destruction agreement signed by President Bush and Soviet President Gorbachev. However, the committee remains concerned over the growing proliferation of chemical weapons, especially in the Middle East. The horrors of the effect of chemical weapons were vividly illustrated during the Iran-Iraq war. More recently, the potential for hostilities in which chemical weapons could be used has been demonstrated by production of these weapons by Libya.

The committee notes that even if an international convention providing for a global chemical weapon ban is signed and implemented, the United States will need to retain defensive chemical warfare capabilities as a hedge against possible cheating. Therefore, the committee believes that the U.S. Army should continue to provide protective training, including live agent training, for U.S. forces to combat the threat of chemical weapons.

The committee further notes that there is presently only one site in the United States, Fort McClellan, Alabama, at which such training is conducted using live agents. The committee believes that unless comparable training facilities are constructed elsewhere, maintenance of this function at the present site will be essential.

GRAFENWOEHR, GERMANY APPLIED INSTRUCTION FACILITY

The Army requested $5.7 million for the construction of a building to house a computer-controlled battlefield simulator to allow personnel to conduct battalion tactical field operations under realistic training conditions. The equipment to perform this task is currently in a leased facility at the Grafenwoehr, Germany field training site.

While the committee recommends that this project be deferred due to the uncertain nature of the long term U.S. military presence in the Federal Republic of Germany, it believes that a more economical approach to this facility requirement would be through the acquisition of the currently leased facility, rather than in construction of a new building. Should the fiscal year 1992–1997 Six Year Defense Program and ongoing political developments justify the continued modernization of the Grafenwoehr training complex, the committee recommends that the Army program funds for the acquisition of the leased structure.

TITLE XXII—NAVY

A–12 FACILITIES

The committee recommends deletion of $19.1 million requested by the Navy for construction of the first increment of an operations and maintenance training facility at Whidbey Island Naval Air Station, Washington. This complex was to have been built to support the initial operational beddown of the A–12 aircraft. In light of the technical difficulties which have been encountered in this developmental program, the committee believes that this construction can be deferred at least 1 year.

The committee is aware that the Department of the Navy has been reevaluating the initial beddown location for the A–12 system, and that it is now considering locating the first squadrons at Lemoore Naval Air Station, California. An integral part of this recent proposal is the restationing of P–3 Orion aircraft to NAS Whidbey Island from NAS Moffett Field, California, which the Navy is evaluating for closure. The committee is aware that the overall size of the P–3 force, and the balance of this force between Active and Reserve components, is a subject of Congressional and Service review.

The developmental delays in the A–12 program offer the committee and the Department of the Navy an opportunity to reevaluate the long term beddown plans for both the P–3 and the proposed A–12 forces. Analysis of these plans will be critically important when the committee evaluates future budget requests for the construction of the A–12 facility infrastructure.

Any subsequent military construction budget request in support of the A–12 shall address the complete beddown plan for this system, to include all programmed locations and multi-year construction costs. Because the Navy's current basing plans tie the initial beddown of the A–12 to the relocation of P–3 assets, the committee directs that the A–12 basing study be accompanied by a companion basing plan for the entire P–3 force which addresses the fiscal year 1992–1997 time frame. This report shall specifically address the mission beddown plans for NAS Whidbey Island through this same period.

MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER

The National Defense Authorization Act for Fiscal Years 1990 and 1991 includes an authorization for fiscal year 1991 of $8 million for the construction of minimum essential training and support facilities at the Marine Corps Mountain Warfare Training Center at Bridgeport, California. In addressing the serious shortfall of safe, sanitary facilities at this austere training area, the conferees also directed that a total of $2.3 million be expended during fiscal year 1990 in minor construction and repair funds to make the most urgent improvements. The conferees further earmarked a total of 33 new family housing units for Bridgeport from the overall authorization of new family housing for Camp Pendleton, Bridgeport's main support base.

The Department of the Navy and the Marine Corps have failed to comply with the conferees' guidance. The urgent construction and repairs directed for fiscal year 1990 have not been carried out, and the brief construction season will soon be over. Likewise, the Department failed to include the $8 million authorization in its revised fiscal year 1991 budget request.

The committee remains very concerned with the hazards to health and the adverse effects on morale and efficiency caused by the current condition of these facilities. For these reasons, the committee adjusted the Marine Corps' construction priorities to include $11.3 million in construction for the Center in fiscal year 1991, and again directs that immediate attention be given to the most urgent deficiencies which can be addressed with unspecified minor construction or maintenance and repair funds during the remaining months of fiscal year 1990.

KINGS BAY, GEORGIA, IMPACT ASSISTANCE

The committee recommends that the military construction request for Naval Submarine Base, Kings Bay be increased by $10.3 million for community impact assistance. This funding increment represents the final segment of a highly successful community impact assistance program which was begun in fiscal year 1984. With the funding of this increment, a total of $58 million will have been authorized for the communities of Camden County, Georgia, and Nassau County, Florida.

These funds represent the unfair and excessive burden which these communities have borne due to the dramatic population increases caused by the construction of a Trident submarine base at Kings Bay. As an example, the population of Camden County has grown at a rate almost six times that experienced prior to the arrival of the Navy mission. By the time the full complement of Trident submarines arrives, the population of this rural community will have more than doubled. In meeting the infrastructure needs of the area's schools, public safety, and human services functions, local and State authorities matched the Federal assistance on approximately a dollar for dollar basis.

Through the consolidated efforts of the local jurisdictions under the Kings Bay Impact Coordinating Committee, in partnership with the Department of the Navy and the Department of Defense's Office of Economic Adjustment, the impacted communities have been able to plan for the expansion of their support infrastructure to meet the demands of the naval personnel and their families.

NAVAL ANNEX, ARLINGTON, VIRGINIA

The committee recommends that the Navy's request for land acquisitions for fiscal year 1991 be reduced from $10.66 million to $4.44 million. In this period of austere funding, the committee does not believe that it can justify paying approximately $6 million to the U.S. Treasury for 14 acres of land adjacent to the Departmental headquarters which have been used by the Navy for over 20 years.

TITLE XXIII—AIR FORCE

RAIL GARRISON MX CONSTRUCTION

The committee recommends deferral of all military construction associated with the deployment of the Peacekeeper missile system in the rail garrison mode. In doing so, the committee believes that the Air Force should continue design of facilities supporting this system at the first two scheduled deployment sites, F.E. Warren Air Force Base, Wyoming, and Barksdale Air Force Base, Louisiana. Completing the design of these facilities will permit expeditious construction at these sites when the other elements of this program warrant deployment.

BASING OF THE F-117 AIRCRAFT

The Air Force military construction budget request included $11 million for the first phase of facility development to support the long term beddown of the F-117 aircraft. As a classified program, the F-117 has been operating from an austere site at Tonopah Reservation, Nevada. Because this site lacks most personnel support facilities, Air Force personnel have been flown to the site on a weekly basis. With the declassification of this system, the Air Force decided to relocate the aircraft to a location with support facilities in order to avoid what it perceives to be substantial additional operating costs associated with the Tonopah site.

Earlier this year, while announcing its intention to inactivate a T-38 fighter training wing at Holloman AFB, New Mexico, the Service further announced that it had selected this base as the permanent site for the F-117. This F-117 siting decision was reportedly based upon operational considerations, as well as the relative costs and pace of facility development at Holloman AFB.

In response to concerns outside of this committee that Holloman AFB might not be the most operationally appropriate and cost effective alternative, the General Accounting Office (GAO) was asked to review the Air Force rationale for this basing decision. It is the committee's understanding that this review will be completed in September 1990.

In light of the Air Force's decision to relocate the F-117 force from Tonopah Reservation, the committee approved the budget request for the first phase of construction at Holloman AFB. In doing so, the committee recognizes that there were as yet unresolved issues about the most appropriate and cost effective location for these aircraft. The committee was also aware that the siting at Holloman AFB might permit accelerating the relocation by as much as a year if additional construction funds were provided in fiscal year 1991. This acceleration opportunity is apparently unique to the Holloman AFB basing alternative, and could, according to Air Force estimates, achieve substantial one time savings by terminating the Tonepah operation as early as possible.

Absent the results of the GAO's evaluation, the committee deferred consideration of this adjustment, but leaves this issue open for reconsideration during the conference on this bill later this year.

The committee urges the GAO to expedite its review of the Air Force basing decision. The committee believes that the F-117 is a high priority tactical air asset which should be permanently sited at the most operationally suitable and cost effective location. The Comptroller General's independent analysis will be critical to this determination.

TITAN IV LAUNCH COMPLEX, VANDENBERG AFB, CALIFORNIA

The committee recommends support of the Air Force request for $19.2 million to begin modification of the Space Launch Complex (SLC) 6 at Vandenberg Air Force Base. The committee notes that the Air Force has been considering the modification of the existing complex, SLC 6, or the construction of a totally new complex which has been designated SLC 7.

Consistent with the committee's guidance to the Department last year, this military construction authorization is limited to the modification of SLC 6. With the submission of the fiscal year 1992-1993 budget submission, the committee requests that the Air Force provide a multi-year funding profile for this entire project.

AIR FORCE ACADEMY, COLORADO

The committee is aware that the current facilities at the Air Force Academy available for instruction in the basic sciences are substantially lacking in the ability to support modern instructional equipment, meet environmental and safety standards, and accommodate the current Academy enrollment. A construction project to correct these deficiencies, valued at $34.2 million, is fully designed, but was not included in the Service's budget request.

The committee believes that this initiative merits funding, if the Academy's enrollment were to continue at or near its current levels. However, in light of the substantial reductions in the officer strength of the Service which are likely to occur, the long term enrollment levels at all of the Service academies are under review.

The committee is aware that the Office of the Secretary of Defense has initiated a review of the appropriate accession levels of all sources of officer procurement, including the military academies. In light of the overall uncertainty regarding the size of the future Air Force officer corps, and the appropriate enrollment levels for the Air Force Academy, the committee is not in a position to address this construction project at this time.

Upon receipt of the Service's 6-year manpower plan for fiscal years 1992–1997, and the associated plans for the cost-effective sourcing of officer accessions, the committee anticipates readdressing the need for modernizing the Air Force Academy's science instruction facilities.

BOLLING AIR FORCE BASE, DISTRICT OF COLUMBIA

In making a general reduction to the Air Force military family housing operations and maintenance funds, the committee intends that the Service not proceed with the first of a four phase proposal to make whole house renovations to 24 general officer quarters at Bolling Air Force Base. While these structures are undoubtedly in need of substantial repairs after their 57 years of use, the overall cost of the first phase of this project, approximately $1.7 million, and the unit cost of $282,000, appear to be excessive in light of current budget constraints. Despite analysis to the contrary, the committee is not convinced that this scale of renovation can be justified as more advantageous to the government than replacement construction. In any case, the committee does not believe that this project enjoys as high a priority as many construction initiatives supporting the quality of life of enlisted personnel which had to be deferred due to budget constraints.

WHITEMAN AIR FORCE BASE, MISSOURI

Whiteman Air Force Base, Missouri, is the site selected by the Air Force as the first operating base for the B–2 aircraft. According to Air Force briefings, it has programmed approximately $620 million for military construction for that location. The amended fiscal year 1991 request includes $96.4 million for this purpose.

The committee notes that the Air Force has never adequately justified the selection of Whiteman Air Force Base for this mission. This issue is particularly relevant in light of the extremely high cost of expanding the base to accommodate the B–2 and the overall reduction of other elements of the strategic bomber force. In the face of the Service's unwillingness to discuss the overall beddown plan for the B–2 force, the committee has not had an opportunity to assess the operational rationale or cost effectiveness of the B–2 siting plan which originally had a construction cost of approximately $1.95 billion. With the reduction in the overall size of the B–2 force, this construction cost will undoubtedly be reduced. Nevertheless, the committee remains concerned about the lack of credible data upon which to exercise its oversight of these very substantial expenditures.

Beyond the matter of the overall cost of developing bases to support the B–2 force, the committee has continued to voice concerns about specific portions of the facility plan. In particular, there have been a great number of questions about the need to provide shelters for each B–2 aircraft.

The committee notes that the Air Force has recently revised its shelter plan for the B–2 and currently proposes to construct 31 austere alert shelters and hangars in lieu of fully equipped maintenance hangars. This change in plans would reportedly reduce the cost per aircraft of the shelter program by about 30 percent.

While the committee believes that the Air Force's revised plan moves in the right direction, it only suggests that the Service's original plan was unjustified. The committee remains unconvinced of the necessity of sheltering each aircraft. Further, because of the changing alert rates of these aircraft, such a sheltering plan lacks the operational flexibility to vary the aircraft's alert rate. As late as this year, the Air Force has substantially changed the planned alert rate of the aircraft based upon the reduced size of the force and other factors. This change points out the need for a facility siting plan and an aircraft maintenance concept which provide maximum operational flexibility.

The committee believes that at this time the B-2 force should be provided hangars or alert shelters for only half of the operational force, above and beyond specialized maintenance structures. The Service's construction plans should be phased to provide this ratio of shelters as aircraft are delivered to the operating bases. During the first several years of operation, the committee directs that the Service maintain and analyze its maintenance experience to determine if there is a material difference in the costs of maintaining sheltered and unsheltered aircraft. Based upon the analysis of these data during the first 5 years of operation, the committee would be willing to reconsider the Service's 100 percent sheltering program.

In light of the above, the committee recommends deferral of funding for additional hangars for the B-2 at Whiteman AFB. The committee also recommends deferral of several construction projects which would expand personnel support facilities. These projects have been justified based upon the projected increase in base population. In light of the questionable long term tenure of the base's Minuteman missile mission, the committee believes that expansion of personnel support facilities and the embarking on an extensive community impact assistance program for the local community is premature. This recommendation parallels a recent Defense Department decision to defer the contracting for leased family housing for base personnel.

The committee directs that the Air Force provide with its fiscal years 1992 and 1993 budget request, a long term population projection for Whiteman Air Force Base which specifically addresses the future of the Minuteman mission. In addition, in order to assess the overall B-2 construction costs, the Service is directed to provide a revised construction schedule, by location, for each B-2 base. This data shall include identification of all bases supporting this system, and the operational and economic rationale for the bases selected. This data shall be provided for each new weapons system which the Service plans to field.

AIR FORCE INTELLIGENCE FACILITIES

The Air Force requested authorization for construction of two intelligence facilities at a classified overseas location. In light of the uncertain future overseas force levels, the committee deferred both projects without prejudice.

Should long term force levels and intelligence support requirements justify these facilities, the committee encourages the Service to resubmit them. However, the committee is unconvinced that two separate facilities offer the most operationally flexible and cost effective design alternative. Absent compelling justification to the contrary, the committee believes that these facilities ought to be collocated to achieve economies of operation and also to provide facility flexibility to accommodate any future realignment of intelligence support functions.

TITLE XXIV—DEFENSE AGENCIES

BASE CLOSURE ACCOUNT

The committee recommends authorization of $967 million for the Base Closure Account. This represents a $50 million addition to the Department's request for this account. This account is to be used exclusively to fund the closure and realignment actions recommended in 1988 by the Defense Secretary's Commission on Base Realignments and Closures.

The committee intends that these additional funds be used for environmental cleanup at the closing installations. These funds are specifically earmarked to finance cleanup measures needed to expeditiously dispose of and economically redevelop these installations. This funding is to be used only when cleanup and restoration under the DoD risk based priority system is not consistent with the facility disposal schedule, and only if the Secretary certifies that expedited cleanup and restoration will not adversely affect cleanup and restoration activities at sites with a higher priority under the DoD risk based system.

The committee commends the Department of Defense and the military Services for establishing a credible management structure for dealing with the closures and realignments recommended by the Defense Secretary's Commission on Base Realignments and Closures. Should the Secretary of Defense decide to close or realign other military installations, the committee recommends that a similar management and accounting structure be put in place to provide visibility to the expenditures and receipts associated with these complex actions.

TITLE XXVI—GUARD AND RESERVE FORCES FACILITIES

RESERVE COMPONENT PLANNING AND DESIGN

The committee recommends increases to the planning and design accounts of several of the Reserve components. The majority of these increases were made to accommodate the design requirements associated with projects which were accelerated into fiscal year 1991 funding. In addition, these increases were intended to accommodate the design of:

—Relocation of ANG activities at Standiford Airport, Kentucky;

—Facilities for a new Navy Reserve mission at Martinsburg, West Virginia;

—A replacement runway at Libby AAF, Arizona.

The committee is concerned about the deteriorating condition of the runway improvements at the Libby Army Airfield. The situation has reached the point that continued military and civilian aviation operations may be in jeopardy. The Secretary of the Army, in consultation with the Secretary of the Air Force, is directed to review the matter and report to the Committees on Armed Services of the Senate and the House of Representatives not later than February 1, 1991, concerning a determination of liability for the present situation and any corrective action necessary to prevent a recurrence of the situation.

EXECUTION OF NATIONAL GUARD PROJECTS

The committee is aware that the Secretary of Defense has placed a moratorium on a substantial portion of the unobligated military construction projects authorized in fiscal year 1990 and prior years. While the committee understands that the purpose of this moratorium is to avoid constructing facilities which are not supported by the Department's long term force structure needs, deferring construction of those National Guard projects which are jointly funded by State and Federal funds might jeopardize their timely execution because of the lapsing of the State appropriations.

In order to avoid the unnecessary delay of these projects due to the need for the reappropriation of State funds, the committee recommends that the Office of the Secretary of Defense expedite the revalidation of these particular projects and, if supported by the projected force structure, release them for obligation as soon as possible.

MILITARY FAMILY HOUSING, NAVAL AIR STATION GLENVIEW, ILLINOIS

The National Defense Authorization Act for Fiscal Years 1990 and 1991 contained a provision, section 2815, that authorized the sale of approximately 14 acres of land operated by the Navy Public Works Center, Great Lakes, Illinois, with the proceeds being used to construct military family housing at Naval Air Station Glenview, Illinois. In light of the shortage of officer housing at that installation, it is the committee's intent that this requirement be given priority consideration in using the proceeds from this sale.

TITLE XXVIII—GENERAL PROVISIONS

PART A—MILITARY CONSTRUCTION PROGRAM CHANGES

MILITARY FAMILY HOUSING RENTAL GUARANTEE PROGRAM

The committee recommends a provision (sec. 2801) that would extend the expiration date of the test authority for the Military Housing Rental Guarantee Program (10 U.S.C. 2821 note) from September 30, 1990, until September 30, 1991.

The committee is concerned that this program has been singularly unsuccessful in developing contracts that would provide military personnel family housing. Despite several revisions to the program, the Department of Defense has not secured one contract under this authority. However, based upon changes enacted in the National Defense Authorization Act for Fiscal Years 1990 and 1991, the Department has testified that it anticipates agreements under this program in the next several months. For this reason, the committee has reluctantly agreed to extend the authority for 1 more year.

The committee received testimony this year from the General Accounting Office that suggested that the Department needs to take a much closer look at the relative economies of different strategies to meet the family housing needs of Service personnel. These include compensation solutions, military construction, and third party-financed alternatives such as the Section 801 Build to Lease and Section 802 Guaranteed Rental programs. In light of the force and installation infrastructure turbulence which is likely to persist for some years, the GAO cautioned against alternatives which involved long term commitments.

Inasmuch as both the section 801 and 802 authorities will expire on September 30, 1991, the committee directs the Department to conduct an analysis of all aspects of the family housing issue to include compensation, construction, and lease alternatives. This report should be provided the committee with the fiscal year 1992–1993 budget submission. The committee is particularly interested in a thorough analysis of third party authorities, including lease purchase options. Part of this report shall be a legislative proposal to provide a new third party financing authority in lieu of the expiring programs.

OPTIONS ON REAL PROPERTY

The committee recommends a provision (sec. 2802) that would extend the Department of Defense's authority (10 U.S.C. 2677) to purchase options on real property prior to receiving authority to proceed with the acquisition. This provision extends this authority from options on real property needed for military construction, to include property which is to be leased.

FAMILY HOUSING IMPROVEMENT THRESHOLD

The committee recommends a provision (sec. 2803) that would amend 10 U.S.C. 2825 by permitting an administrative, rather than a legislative, waiver to the current annual limitation of $40,000 for the improvement of a military family housing unit.

The committee believes that the current expenditure cap is appropriate, but recognizes that waiving this limitation by statute is cumbersome. By making the waiver administrative, the process will become more responsive to the changing cost estimates of construction projects while still retaining the committee's oversight.

PENTAGON TRANSFER

The committee recommends a provision (sec. 2804) that would transfer control of the Pentagon Reservation from the General Services Administration to the Department of Defense.

Last year, the Senate passed a similar provision as part of the National Defense Authorization Act for Fiscal Years 1990 and 1991. This provision, which was requested by the administration, recognized the extremely deteriorated state of the Pentagon and other facilities on the Pentagon Reservation. The transfer of the complex to the DoD would permit near term initiation of a multiyear renovation of the Pentagon.

The conferees on the bill reluctantly dropped this provision inasmuch as the relevant committees of the House of Representatives had not had an opportunity to carefully analyze this proposal. As part of the agreement on this matter, the conferees directed the GSA and the DoD to develop a plan for the renovation of the Pentagon, and submit it in a timely manner so that the relevant committees of the Senate and House of Representatives could hold hearings on this matter. Absent progress on this issue by the GSA and its relevant congressional committees by mid-April, the Armed Services Committees of the Senate and the House of Representatives intended to reintroduce the transfer of the Pentagon Reservation to the DoD during fiscal year 1991.

On March 15, 1990, the GSA and the DoD provided a joint report to Congress which outlined a plan for the renovation of the Pentagon. Following a detailed review of this plan by the Office of Management and Budget, the administration decided that the Pentagon Reservation should be transferred to the DoD which ought to plan, manage, and fund the renovation. According to that report, the two principal reasons for this transfer were the significant impact which the renovation would have on the Federal Building Fund during the estimated 10 year period of construction, and the complex challenge of providing sustained security and readiness during the period of construction to the high priority national security functions carried out within the Pentagon.

The committee agrees with the administration's conclusions, and believes that the transfer of the Pentagon Reservation is the most efficient and cost effective approach to effecting the long overdue renovation of the Pentagon. As the size and mission of the Department's presence in the National Capital Region changes in the coming years, and both the GSA and DoD face severe funding constraints, establishing the management and funding responsibility with the agency directly affected by this project becomes even more crucial.

The DoD has already designed a replacement central energy plant for the complex, and has an approved plan for the overall renovation. The committee supports this plan in principle, and stands ready to work with the Department to develop a funding strategy to proceed as expeditiously as possible with construction.

BASE CLOSURES AND REALIGNMENTS

The committee recommends a provision (sec. 2805) that would amend the current law (10 U.S.C. 2687) regarding the closure or realignment of military installations. The provision would codify several streamlining provisions enacted on a one-time basis in the Base Closure and Realignment Act of 1988 (P.L. 100-526). Specifically, the provision would:

—Establish a permanent Base Closure Account to provide a clearly visible funding source for these actions. In addition to covering other closure expense elements, this account would be used to fund the environmental restoration of closing bases, to the extent that environmental restoration carried out under the Department of Defense risk based priority system would not be completed in time to support the timely disposal and redevelopment of the closing bases. The committee intends that environmental restoration funded under the Base Closure Account would not be done at the expense of the Department's risk based priority restoration program. In requesting funds under the base closure account for environmental restoration, the Secretary would certify that environmental restoration under the Department's risk based priority system is not adversely affected by these expenditures.

Throughout the period of closure, the committee expects the Department to provide detailed budget justification for expenditures under this account, to include the projected environmental cleanup costs (regardless of funding source). The Department's fiscal year 1991 budget justification data for the current base closure account provides an excellent model.

—Permanently delegate property disposal authority from the Administrator of General Services to the Secretary of Defense for these specific disposal actions.

—Narrow the applicability of the National Environmental Policy Act as it applies to the decision to close installations. Other applications of that statute related to the potential environmental impact of relocating forces to a new location, or reusing former military installations, would be unaffected.

The committee realizes that the reductions in military personnel included in this bill, future reductions which are planned to accommodate changing threats to U.S. interests, and the need for deficit reduction will lead to significant numbers of base closures. Already, the Department of Defense is considering a number of potential closures announced in January 1990.

The committee believes that the above changes would permit the Department to reap the benefit of certain waivers which were applied only to those closures recommended by the 1988 Commission on Base Realignment and Closure. These waivers would permit a more rapid closure of installations, and realization of the attendant savings. They would also expedite the disposal of the property and the development of local economic revitalization plans.

The committee anticipates that the Department will be providing the Congress a number of base closure decisions next year with the submission of the fiscal year 1992–1993 budget request. The committee expects that these decisions will be accompanied by a full description of the Department's 6-year force structure and basing plan for fiscal years 1992–1997. This long term force and base structure plan, addressing both domestic and overseas installations, will be essential to Congressional review of the Secretary's closure decisions. The committee serves notice that, absent a long term force and base structure plan accompanying recommended base closures, it will be impossible for the committee to adequately assess closure recommendations by the Department.

HOMEOWNERS ASSISTANCE PROGRAM

The committee recommends a provision (sec. 2806) that would provide the Secretary of Defense increased flexibility to reprogram funds into the Homeowners Assistance Program from other appropriated fund sources. This program provides financial assistance to Department personnel who would suffer unduly by being forced to sell their homes in a real estate market which is depressed because of the announced closure, realignment, or substantial reduction of a military installation.

The current and prospective base closures are expected to increase the call on this program substantially in the coming years. Since the financial needs of beneficiaries are largely unpredictable, as is the ultimate replenishment of the fund through the sale of properties, the Department is unable to adequately program for this cost through the normal budget process. This provision would permit the Secretary, upon notification of the appropriate committees of Congress, to reprogram funds for this purpose as the needs become clear.

EXPANSION OF HOMEOWNERS ASSISTANCE PROGRAM

The committee recommends a provision (sec. 2807) that would expand the eligibility of the Homeowners Assistance Program to apply to U.S. employees of a nonappropriated fund instrumentality of the Department of Defense. The provision would also extend this benefit to Federal employees and nonappropriated fund personnel serving overseas who have reemployment rights in an organization which is undergoing a base closure or realignment. These changes would provide these employees the same protections from undue financial loss associated with the forced sale of a home in a real estate market depressed by the closure, realignment, or substantial reduction of a military base as is currently provided to other DoD employees.

COMMUNITY PLANNING ASSISTANCE

The committee recommends a provision (sec. 2808) that would expand the authority (10 U.S.C. 2391) of the Department of Defense to provide planning and economic redevelopment assistance to communities adversely affected by substantial increases or reductions in defense installation or industrial activity.

For several decades, the Office of Economic Assistance (OEA) has provided economic redevelopment planning grants to communities which were adversely affected by rapidly changing populations or economic activity levels caused by decisions of the Department of Defense to open or close military installations, or to cancel or terminate major defense contracts. With the anticipated reductions in military force structure over the next several years will come substantial numbers of installation closures. Likewise, reductions in the Services' procurement accounts will likely cause substantial loss of employment in local areas near major defense contractors.

The committee's provision would broaden the criteria by which communities might be eligible for assistance from OEA by reducing the threshold of job loss from 2,500 to 1,000 in rural areas, or by measuring the unemployment impact as a percentage of the employed force in the local area.

The provision would also anticipate substantial increases in planning assistance by eliminating the current statutory cap of $2 million dollars.

The committee anticipates that OEA will experience a substantial increase in requests for assistance within the next year as more installations are closed and the Department's procurement and research programs are reduced and redirected. For this reason, the committee recommends a substantial increase in the staffing of OEA, and a more than doubling of the requested funding level for assistance grants.

The committee is concerned that the various agencies represented on the Economic Adjustment Council (EAC) are not yet taking adequate account of the prospective requirements which they will be requested to support during the next several years as the Nation's economy makes a significant shift from defense spending. The committee hopes that the administration will form an interagency task force to coordinate prospective changes in defense activities and spending with the development of timely adjustments to these agencies' budgets so that Federal resources will be available to assist communities which face substantial economic dislocation because of the defense changes.

REVENUE FROM SALE OF EXCESS DEPARTMENT OF DEFENSE LAND

The committee recommends a provision (sec. 2809) that would amend the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 485) to authorize the Department of Defense to retain the proceeds of any excess property which is sold. The provision would provide that half the proceeds would be made available to the local installation for real property maintenance or environmental restoration, and the remaining half would be deposited with the Military Department involved for use to meet Department-wide real property maintenance or environmental restoration requirements.

This provision would not alter the current screening and disposal process conducted by the General Services Administration. State and local governmental agencies would continue to be screened prior to the commercial sale of property. This provision would also maintain the current congressional oversight over property disposal.

REVENUE FROM LEASING OUT OF DEPARTMENT OF DEFENSE ASSETS

The committee recommends a provision (sec. 2810) that would amend 10 U.S.C. 2667 to direct that the proceeds from certain leases of Department of Defense assets would be returned to the Department of Defense. One half of the proceeds of such a lease would be returned to the installation involved to be used to cover the administrative costs of the lease, real property maintenance, or environmental restoration. The remaining half would be deposited with the Military Department involved for use to meet Department-wide real property maintenance or environmental restoration requirements.

This provision would not alter the current authority to use the proceeds of agricultural or grazing leases to finance multiple land use management programs.

RESIDUAL VALUE OF VACATED OVERSEAS BASES

The committee recommends a provision (sec. 2811) that would express the sense of the Senate that the Department of Defense should be the lead agency for negotiations with host nations regarding the residual value of vacated overseas military installations. It would be the sense of the Senate that, in light of the overall contribution of the United States to the NATO Alliance and to the facility development of the vacated installations, this value be as high as possible. Finally, it would be the sense of the Senate that the cost to the United States of any environmental cleanup not exceed the residual value of the installation and that the value of each vacated installation be determined on an individual basis.

CLOSURE OF OVERSEAS MILITARY INSTALLATIONS

The committee recommends a provision (sec. 2812) that would direct that the residual value from closing overseas military bases accruing to the United States from negotiations with host governments be returned to the Department of Defense. These moneys are to be used by the military Service involved to meet outstanding requirements for real property maintenance or environmental restoration at military bases within the United States.

Since 1949, the United States has invested over $7.4 billion in military construction and another $4.4 billion in NATO Infrastructure funds in U.S. and NATO facilities and command and control systems within the NATO Alliance. The vast majority of these sums were to construct or improve facilities in Europe. With the dramatic improvements in the European political climate and the prospective reductions in military forces in the area, the United States will be vacating hundreds of modern structures, most of which can be redeveloped for civilian reuse.

Within the particular Status of Forces Agreements which apply to the U.S. military presence, there are mechanisms to negotiate for payment of the residual value of facilities which are vacated during a military withdrawal. In light of the substantial investment which the United States has made in its overseas facilities, the committee expects that significant residual values will be attached to military bases which will be closed. The committee intends that these values be as high as possible, and that these sums accrue to the Department of Defense either in cash to be applied to real property maintenance or environmental restoration in the United States, or as in-kind host nation support for the residual U.S. military forces.

The committee also believes that equipment and other related personal property associated with the vacated structures be retrograded to meet U.S. military requirements or foreign military assistance. That materiel which is either not needed for these purposes or cannot be economically transported elsewhere shall be sold for the greatest possible return. The proceeds of these sales shall also be returned to the Department of Defense for real property maintenance or environmental restoration.

The committee intends to make the stewardship of the Department's overseas real property and equipment assets a matter of special interest, and has requested that the General Accounting Office establish strict oversight mechanisms.

ALTERNATIVE UTILIZATION OF MILITARY FACILITIES

The committee recommends a provision (sec. 2813) that would clarify section 2819 of the National Defense Authorization Act for 1989 and broaden the scope of the Commission on Alternative Utilization of Military Facilities.

The 1989 provision established an interagency commission to screen closed or to be closed, underutilized, and excess military facilities for potential reuse as minimum security facilities for nonviolent prisoners, or drug treatment facilities for nonviolent drug abusers.

This Commission was established by Executive Order on July 7, 1989. Since that time, it has published one preliminary report, and is in the process of developing a second report. The Department of Defense has identified about 4,900 buildings and parcels of land on 159 installations for potential reuse for these purposes. Of that sum, approximately 1,500 met initial screening criteria for substance abuse treatment centers. These sites are now being offered to State and local treatment authorities for potential redevelopment for this purpose.

Of the 4,900 DoD properties, the Commission determined that 23 met the Bureau of Prisons (BOP) screening criteria for minimum security prisons. Only 6 of the 23 are still under consideration for possible reuse by the BOP. The Bureau is currently operating minimum security prisons on nine active military installations, and has sited prisons on 12 previously closed military bases.

The committee is disappointed at the pace and results of the Commission's work to date. Despite the administration's rhetoric regarding the war on drugs and the attendant need for prisons and treatment centers, it was slow to implement this congressional initiative. Ongoing General Accounting Office (GAO) work shows that the Executive Order establishing the Commission was ambiguous regarding whether property associated with closing military installations would be screened. As a result, none of the 24 major installations recommended for closure by the Commission on Base Realignments and Closures has been reported to the utilization commission in its entirety. Only portions of some of these installations were reported as presently underutilized or excess to the current mission of the base.

The GAO also found that the Commission, pursuant to its mandate, has only been evaluating properties for minimum security prisons; thus, it is not addressing the Bureau's critical need for higher security level facilities. In addition, the Commission has not taken into account the pressing needs of State, regional, and local corrections authorities. Recently, the Bureau determined that its National Institute of Corrections may have some as yet unspecified role in identifying State, regional, and local prison requirements to the Commission. The committee believes that the Commission needs, as a matter of priority, to develop a mechanism to insure that State, regional, and local prison needs are addressed during its property screening process.

In light of these deficiencies, the committee recommends that the enabling legislation for the Commission on Alternative Utilization of Military Facilities be amended to clarify the inclusion of bases scheduled for closure, and to broaden its scope to include higher security level prisons, including "shock incarceration" facilities, commonly known as "boot camps". Further, the amendment would direct the Commission to specifically take into account the needs of State, regional, and local corrections authorities.

As the type and level of military activity at DoD installations change over the next several years, there may be additional opportunities for portions of bases which remain in the active inventory to be used for prisons or substance abuse treatment centers. The committee believes that the Defense Department needs to develop some criteria which can be uniformly applied to military bases to determine whether such joint use is operationally feasible. The Department also needs to consider cost sharing arrangements which might make such multiple use arrangements more attractive to military commanders. The committee directs that the Department, in conjunction with the agencies represented on the alternative utilization commission, address these issues in the Commission's next report to the Congress.

JOINT MILITARY AND CIVILIAN USE OF MILITARY AIRFIELDS

The committee recommends a provision (sec. 2814) that would direct the Secretaries of Defense and Transportation to conduct an evaluation of military airfields with a view toward identifying those which hold potential for civilian reuse or, assuming continued military activity, joint military/civilian use.

The committee is aware that such evaluations have occurred in the past, at both the initiative of the Congress and the affected departments and agencies. As late as 1988, the Federal Aviation Administration (FAA) identified close to 80 military airfields which offered some potential for joint use. With the implementation of the recommendations of the Commission on Base Realignment and Closure, six military airfields are currently being evaluated for conversion to civilian use.

With the prospective reduction of the Defense Department's force and base structure, the committee anticipates that a number of additional airfields can be made available for redevelopment as civilian airfields. Installations' potential to help solve the national shortage in commercial and general aviation airfields should be taken into account in selecting bases for closure and realignment. Interim joint military/civilian use may be useful in easing the transition from exclusive military operations to civilian use. This sort of arrangement might also reduce the adverse effects of the economic dislocation of a base closure.

Beyond base closures themselves, the reduction in force structure will likely change the level and mix of aviation activities at some bases which will be retained. All these developments suggest that the DoT and DoD could profit from a reexamination of the issue of joint use.

The committee directs that the DoT and DoD jointly fund such a study of existing military airfields to determine if additional installations could not be used as civilian airports or jointly used by military and civilian aviation. In addition to analyzing the military airport inventory, this study would address as a minimum:

—An overview of military and civilian aviation installation needs, including a priority listing of civilian requirements.

—Identification of obstacles and incentives to joint use, to include the issues of operational compatibility and realistic cost sharing. The committee is particularly interested in ways in which revenues from civilian use and resources of the Airport Trust Fund might help offset the costs of operating joint use airfields. The committee is also interested in whether commercial fixed base operators might be considered as parties to a joint use agreement.

—Legislative remedies to overcome obstacles or provide incentives for capitalizing on the military airport infrastructure to meet broader national aviation objectives.

Part B—Land Transactions

ARMY RESERVE CENTER, LITTLE ROCK, ARKANSAS

The committee recommends a provision (sec. 2821) that would authorize the Secretary of the Army to convey back to the University of Arkansas at Little Rock, the Army's lease hold interest in a surplus Army Reserve Center which is situated on the university campus. As a consideration for the return of this interest, the university will accept the property and improvements in an "as is" condition.

REDSTONE ARSENAL, ALABAMA

The committee recommends a provision (sec. 2822) that would authorize the Secretary of the Army to convey a certain parcel of land at Redstone Arsenal, Alabama, to the Solid Waste Disposal Authority of the City of Huntsville, Alabama.

PINON CANYON MANEUVER AREA, COLORADO

The committee recommends a provision (sec. 2823) that would authorize the Secretary of the Army to transfer certain portions of the Pinon Canyon Maneuver Site, Colorado, to the United States Forest Service. This transfer will permit the protection of valuable paleontological and archeological resources, while ensuring that the military training mission of the area is not unacceptably affected.

The committee is aware that the Department of the Army and the United States Forest Service have been in negotiations regarding an interchange of the land at Pinon Canyon, Colorado, and approximately 32,000 acres of National Forest land at Camp Shelby, Mississippi. The Camp Shelby initiative would permit the Army to gain control of land within the boundaries of Camp Shelby which would be used for maneuver training. Conclusion of this negotiation has been delayed pending completion of an environmental impact statement (EIS) concerning the potential impact of armored training at the Mississippi site.

Assuming that the EIS concludes that the environmental impacts of the proposed training at Camp Shelby can be satisfactorily mitigated, the committee would support the conveyance of the land in question from the Forest Service to the Department of the Army. If enabling legislation is needed to achieve this end, the committee would consider it as part of its review of the budget request for fiscal years 1992 and 1993.

FORT MEADE RECREATION AREA, DELAWARE

The committee recommends a provision (sec. 2824) that would authorize the Secretary of the Army to convey to the State of Delaware a parcel of real property at Cape Henlopen, Delaware, which was transferred from the State during World War II. The provision specifies that the State shall reimburse the Armed Forces for improvements made to the site by the Morale, Welfare, and Recreation Fund, shall extend State resident privileges to members of the Armed Services using the park, and other conditions.

FLORIDA SOLAR ENERGY CENTER

The committee recommends a provision (sec. 2825) that would authorize the Secretary of the Air Force to purchase from the State of Florida a leasehold interest in property on Cape Canaveral Air Force Station which has been leased to the State as the site of the Florida Solar Energy Center. Due to changing Air Force mission requirements, the Service has found that the State's activities are no longer compatible with the base's primary function.

FORT BENNING, GEORGIA, LAND EXCHANGE

The committee recommends a provision (sec. 2826) that would authorize the Secretary of the Army to enter into a value for value exchange of land at Fort Benning, Georgia. This provision will permit the installation to enhance its training range capability while disposing of property which is of marginal value to the post's military mission, but which permits economic redevelopment.

BARBERS POINT NAVAL AIR STATION, HAWAII

The committee recommends a provision (sec. 2827) that would direct the Secretary of the Navy to enter into negotiations with the State of Hawaii to develop an agreement of joint military and civilian use of the aviation facilities at Barbers Point Naval Air Station, Hawaii.

The planned phase out of the current TACAMO EC-130 mission at Barbers Point NAS, coupled with other prospective reductions in military aviation activities at that installation, make this airfield an attractive reliever airfield for general aviation which currently uses the overcrowded Honolulu International Airport.

DILLINGHAM ARMY AIRFIELD, HAWAII

The committee recommends a provision (sec. 2828) that would authorize the Secretary of the Army to convey to the State of Hawaii the Service's interest in certain ceded lands which constitute a portion of Dillingham Army Airfield, Hawaii. This conveyance would recognize the reduced level of Army activity at this airfield and its importance as a general aviation airport. In consideration for the return of control of these ceded lands, the State would enter into a long term joint use agreement with the Army to insure continued access for the Service's limited aviation operations.

ARMY RESERVE CENTER, SOUTH BEND, INDIANA

The committee recommends a provision (sec. 2829) that would authorize the Secretary of the Army to enter into a value for value exchange of land with the City of South Bend or a nonprofit corporation acting on behalf of the city which will permit the relocation of an Army Reserve Center into a more modern facility which will meet current and projected unit needs.

The committee intends that the Department of the Army and the City of South Bend, Indiana, with the cooperation of the Civic Foundation, promptly execute the land exchange which will result in the relocation of the Northside Army Reserve Training Center. This exchange will provide the Army with fee simple ownership of property in South Bend in exchange for a depreciating leasehold. The exchange is in the best interests of the United States.

MARINE CORPS FINANCE CENTER, MISSOURI

The committee recommends a provision (sec. 2830) that would authorize the Secretary of the Navy to enter into a value for value exchange of land with the City of Kansas City, Missouri. In exchange for the sale of a tract of approximately 12 acres which the Department of the Navy had acquired for a Navy and Marine Corps Reserve Center, the city would provide approximately 10 acres adjacent to a family housing complex which will be developed to support the military family housing function. Engineering studies conducted subsequent to the acquisition of the land for the Reserve Center concluded that it could not be economically developed at that location.

CAMP WITHYCOMBE, OREGON

The committee recommends a provision (sec. 2831) that would authorize an exchange of reversionary interests between the Department of the Army and the State of Oregon. This value for value exchange will permit the development of a State-operated railway museum on lands which are no longer needed for defense purposes.

FORT DOUGLAS, UTAH

The committee recommends a provision (sec. 2832) that would authorize the Secretary of the Army to convey to the University of Utah approximately 64 acres of land comprising a portion of the former Fort Douglas, Utah, which is to be closed as an active Army installation. The university campus surrounds the former post, and as a consideration, the university will maintain and operate certain historical buildings and areas, and waive other entitlements which may be due the State of Utah under two other laws.

NAVAL RESERVE CENTER, BURLINGTON, VERMONT

The committee recommends a provision (sec. 2833) that would authorize the Secretary of the Navy to convey to the City of Burlington, Vermont, the Department's interest in a Reserve Center. The provision would permit the Navy to retain the proceeds of this sale which would be applied to the construction of a modern center elsewhere in the area which would meet the long term needs of the Navy Reserve. Elsewhere in the bill, the committee recommends an authorization for appropriation of $2.5 million to cover the remaining cost of the new center.

FORT A.P. HILL, VIRGINIA

The committee recommends a provision (sec. 2834) that would authorize the Secretary of the Army to convey approximately 150 acres of Fort A.P. Hill, Virginia, to the Northern Virginia Regional Correctional Commission for the purpose of constructing and operating a regional correctional facility.

DIVISION C—OTHER NATIONAL DEFENSE AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

NEW PRODUCTION REACTORS

Three years ago, the committee took the first steps towards modernizing the Nation's aging nuclear weapons complex, particularly the tritium production capacity. As the committee stated last year, "The committee strongly supports the acquisition of new production reactor capacity, believing that an assured supply of tritium is the highest nuclear material priority in support of the Nation's nuclear deterrence forces." This position has not changed. The tritium supply problem has become more acute. An increasing number of environmental and safety problems and concerns have been identified at the Savannah River Plant; thus, the reactors are not in a position to resume operations before late in calendar year 1990 or early 1991. This schedule may also prove overly optimistic. The committee concurs fully in Secretary of Energy Watkins' pledge not to resume operation of the reactors unless they can be started safely.

In the meantime, DoE must aggressively pursue its new production reactor program. In doing so, however, the Department must ensure that all production options be kept open and pursued. Although the committee remains concerned about the ability to afford concurrent construction of two reactors, none of the options should be foreclosed or limited at this time. All options should remain open until the Environmental Impact Statement has been completed and the Department has made a final decision on the number of reactors needed.

The committee commends the Department for its timely submission of the new production reactor management and budget plan. This concise and informative report was most helpful to the committee. The committee directs the Secretary of Energy to submit an updated version of this report by March 1, 1991.

The administration has requested $363 million for the new production reactor program in fiscal year 1991. Of this request, $132.9 million is for new production reactors support, $8.8 million is for capital equipment, and $221.3 million for "if . . . prudent," initiation of a "contract for construction management and possible initiation of long lead procurement(s)." The committee is concerned that this decision may be inconsistent with the policy to keep all production reactor options open until such time as the Environmental Impact Statement is completed and a Record of Decision issued. The committee notes that the Department's estimate for completion of the Environmental Impact Statement and Record of

Decision is late in the first or early in the second quarter of fiscal year 1992.

The committee recommends authorization of $375 million, an increase of $76.052 million over the fiscal year 1990 funding level. This 21 percent increase is necessary to maintain timely acquisition of new reactor production capability.

INERTIAL CONFINEMENT FUSION

Inertial confinement fusion (ICF) is a laboratory scale, controlled nuclear fusion that occurs in a small deuteriun-tritium sphere or pellet. To achieve the nuclear fusion, the sphere or pellet must be compressed so that it stays intact long enough to allow the nuclear fusion to occur. Theoretically, laser beams should be able to provide sufficient energy to compress the pellet. The ICF program seeks to achieve a small thermonuclear explosion in the laboratory to study weapons physics and nuclear weapons effects, and in the long term, to explore the possibility of using ICF as an energy source. A significant amount of heat energy would be produced as a result of the explosion that could be used to generate electricity.

Section 1431 of the National Defense Authorization Act for Fiscal Year 1989 directed the Secretary of Energy to establish a Program Review Group on Inertial Confinement Fusion. This review group was directed to review the accomplishments, management, goals, and anticipated contributions of the ICF program. A preliminary report from the review group was due by January 15, 1990, and a final report is due by September 15, 1990.

The National Academy of Sciences (NAS) was commissioned by the Secretary to carry out the review. The NAS ICF Review Committee filed its preliminary report in February of this year. In its report, the Review Committee presents a positive picture for the ICF program. Nevertheless, because the report is preliminary, and because the Secretary of Energy has not yet had the opportunity to review and comment on the preliminary and final reports, as he is directed by the Act, and in keeping with budget restraints, the committee is unable to recommend full implementation of the Review Committee's *preliminary* recommendation. Therefore, the committee recommends approval of the budget request of $166.8 million. The committee notes, however, that the budget request is a 1 percent decrease from the fiscal year 1990 appropriation and that the Review Committee recommends increasing the ICF budget for fiscal year 1991. The committee anticipates that the Department's budget request for fiscal year 1992 will take into consideration the Review Committee's final report.

TECHNOLOGY TRANSFER

The committee recommends approval of $100.011 million for the weapons research and development special projects technology transfer fund of which $10 million shall be used for the technology transfer program known as the advanced manufacturing initiative. This initiative was established by the Department of Energy in conjunction with the National Center for Manufacturing Sciences, pursuant to the National Competitiveness Technology Transfer Act of 1989.

VERIFICATION AND CONTROL TECHNOLOGY

The committee is disappointed that the Department of Energy has once again failed to adequately support the arms control verification research efforts of its laboratories in its fiscal year 1991 request. The committee received testimony from both the Under Secretary of Energy and the directors of the Department of Energy laboratories that the requested funding is inadequate to support ongoing arms control negotiations and the requirements of recently concluded agreements. The Senate Select Committee on Intelligence has also recommended additional funding for this very productive research effort with a long track record of successes. The committee therefore added $43.2 million to the Department of Energy request for detection technology. The committee directs the Secretary to submit a report to the Committees on Armed Services of the Senate and the House of Representatives within 45 days after enactment of the bill, a report that fully describes each project to be funded. The committee urges the Department to include adequate funding for this function in its fiscal year 1992 budget request.

SPECIAL NUCLEAR MATERIALS LABORATORY

The committee directs that funding for the special nuclear materials laboratory at Los Alamos National Laboratory shall not be obligated or expended until the Secretary of Energy has submitted a 5-year budget plan detailing long-term plans for funding programs and projects of the national security programs for the Department of Energy, including plutonium processing and production, required by the National Defense Authorization Act for Fiscal Years 1990 and 1991.

TRANSPORTATION IMPROVEMENTS AT LAWRENCE LIVERMORE NATIONAL LABORATORY

The committee remains disturbed that the Department of Energy has not acted more expeditiously to implement Phase I of the Lawrence Livermore National Laboratory and Sandia-Livermore Laboratory agreement with the City of Livermore, California to share transportation improvements. The City of Livermore, which is adjacent to the laboratories, has funded a considerable program of transportation improvements that has directly benefited the Livermore and Sandia national laboratories. The committee recognizes that the laboratories should contribute their share of the improvements provided by the city, and directs the Department of Energy to make payments to the City of Livermore in accordance with the agreement negotiated in 1989.

PLUTONIUM RECOVERY MODIFICATION PROJECT

The committee is concerned that the Department of Energy has not yet submitted the 5-year plan for modernization required by the National Defense Authorization Act for Fiscal Years 1990 and 1991. Absent a clear plan for the future of the nuclear weapons complex, and the Rocky Flats facility specifically, the committee cannot justify the expenditure of $65 million for the design and development of a new plutonium processing facility at Rocky Flats. At the same time, the DoE recognizes that its cleanup activities request for fiscal year 1991 is underfunded. Accordingly, the committee has deleted all funding for the plutonium recovery modification project (PRMP) at Rocky Flats Plant and shifted those funds to the environmental restoration and waste management account.

At such time as the Department of Energy develops and submits to the Congress a plan detailing long-term guidelines for the DoE nuclear weapons complex, including a specific plan for the future of the Rocky Flats Plant, the committee shall consider any reprogramming request for the PRMP project or related facilities as the Secretary of Energy may submit.

Of the funds transferred to the environmental restoration and waste management account, the Secretary of Energy may use such funds in part to reimburse the communities surrounding the Rocky Flats Plant for water projects designed to protect those communities from run-off from Rocky Flats.

FOLLOW-ON-TO-LANCE AND W82 WARHEAD

The committee directs that all R&D activity with regard to the Follow-On-To-Lance and the W82 warhead for the 155mm nuclear artillery shell programs shall cease and that the funds requested for those purposes be reallocated to research and development of safety improvements in the existing weapons stockpile, including incorporation of insensitive high explosive and modern electronics to the maximum extent possible.

NUCLEAR DIRECTED ENERGY WEAPONS

The programs of the Department of Energy related to the Strategic Defense Initiative (SDI) are intended to serve as risk reduction and a technical hedge against Soviet development of nuclear-driven defense systems. Although the present SDI architectures continue to omit plans for any nuclear directed energy weapons (NDEW), it is necessary and prudent to continue to develop an understanding of the physics and capabilities of possible NDEW sufficient to understand what threat would be posed by a foreign NDEW threat. The administration's budget request for NDEW is $191.904 million. In light of the committee's priorities and the potential that foreign NDEW work will be significantly curtailed, the committee recommends approval of $106.904 million for all NDEW-related activities.

NUCLEAR DEPTH/STRIKE BOMB

The Department of Energy has requested $13.7 million, plus funding for construction of additional weapons production capability, to produce the nuclear depth/strike bomb (B-90) for naval aircraft. The committee recommends denying any funds for this purpose.

The B-90 is intended to replace the Navy's B-57 tactical strike bomb and B-57 nuclear depth bomb. The committee has serious questions about the need to replace either version of the B-57 when it is retired. The Navy is already scheduled to receive new, modernized versions of the B-61 tactical strike bomb, reducing the need to replace the B-57 in this role. At the same time, the Navy is de-emphasizing nuclear anti-submarine warfare (ASW). Admiral Carlisle Trost, the former Chief of Naval Operations, testified to the committee that the Navy has retired the entire inventory of SUBROC and ASROC systems, which were the only nuclear ASW weapons aboard surface ships and submarines. This raises serious doubts about the need to maintain a nuclear ASW capability for naval aircraft.

It is estimated that the cost of the B-90 will ultimately be in the $1 billion range. Before the committee can approve proceeding down this expensive path, it would need justification. Accordingly, the committee directs the Navy to supply detailed material on the mission and need for the B-90 with its fiscal year 1992 budget request, if it proposes to proceed with production of the B-90.

B-83 REDUCTION

The committee reduces funding for the B-83 bomb because of a commensurate reduction in the strategic bomber force structure. This reduction is also being taken at this time due to the decreased production ability at the Department of Energy Rocky Flats Plant and to minimize critical nuclear material shortages.

B-61 REDUCTION

The committee reduces the funding for production of the B-61 bomb to reflect the commensurate reduction in air wings by the Air Force. These reductions reflect the eroded target base for the B-61 as well as the decreased production capacity at the Rocky Flats Plant for fiscal year 1991. Moreover, the committee believes that there are a sufficient quantity of B-61s in stock to meet current needs.

FUNDS TRANSFER

The committee would like to add $12 million to the weapons research and development account for inertial confinement fusion research at the University of Rochester, but could not find additional DoE sources. Because this program is also of interest to the Department of Defense, the committee has provided a vehicle to transfer funds from DoD to DoE, should both agencies agree on priorities, and should DoD find funds from lower priority programs available during fiscal year 1991.

REMANUFACTURE OF NUCLEAR STOCKPILE WEAPONS

In its report accompanying the National Defense Authorization Act for Fiscal Years 1990 and 1991 (S. Rept. 101-81), the committee indicated its desire to become "fully informed regarding the technical options and costs for the remanufacture and substitution of proven nuclear weapon designs in the stockpile in the event that future budget limitations and possible negotiated restrictions on nuclear testing limit future opportunities to develop and certify the performance of new weapons designs." The committee directed the Secretary of Energy, in consultation with the Secretary of Defense, to submit a report on weapon remanufacture not later than May 1, 1990. As of July 10, 1990, the date at which the committee began its mark-up of the fiscal year 1991 defense budget request, this report had still not been received by the committee, and the Department of Energy had failed to respond to inquiries regarding the date by which it expected to submit this report. Consequently, the committee recommends a provision that would require preparation of the report as specified by the committee last year for submission not later than February 1, 1991.

LABORATORY INDEPENDENT RESEARCH DEVELOPMENT FUNDS

At the present time, the roles and missions of the Department of Energy national laboratories are changing rapidly, none more so than those whose basic missions center on national security activities. It is crucial that these major national technical assets be conserved while, at the same time, their capabilities are well-utilized in the service of the evolving national interest. The committee therefore believes that it is appropriate to provide a statutory foundation for the ongoing independent research and development programs which serve to adapt the capabilities of these laboratories to changing national priorities and needs, in addition to strengthening legislative oversight of this bellwether R&D.

In 1983, the Packard Panel of the White House Science Council reviewed the Federal laboratories and made a number of highly regarded recommendations. The Panel's two recommendations which are particularly pertinent to the present issue are:

> "3-2. At least 5 percent, and up to 10 percent, of the annual funding of the Federal laboratories should be devoted to programs of independent research and development at the laboratory directors' discretion. Federal agencies should establish a mechanism to evaluate the results of such work, with the size and continuation of discretionary funds related to laboratory performance. In order to encourage cooperative research programs, the laboratory directors should have the authority, and be encouraged, to spend part of the discretionary funds at appropriate universities and industries.
>
> "3-3. Federal laboratories should be allowed to carry forward remaining funds into the next fiscal year. This would eliminate the wasteful practice of hurried spending at the end of each fiscal year."

Section 3130 of the bill would provide statutory implementation of these Packard Panel recommendations for the DoE national laboratory programs and activities authorized pursuant to recommendations of the Armed Services Committees. The committee strongly believes that this action will serve to explore on a reasonable scale these carefully considered steps for enhancing the effectiveness of all federally supported laboratories, and will follow the Department's implementing activities closely.

HANFORD LOANED EXECUTIVE PROGRAM

Section 1434 of the National Defense Authorization Act for Fiscal Year 1989 allowed contractors of the Department of Energy at Hanford Reservation to loan personnel to the Tri-City Industrial Development Council, and required contractors to compensate such loaned personnel. This program has been successful in bringing the competence of the Department's contractors to bear on local problems at Hanford. Accordingly, the committee recommends a provision (sec. 3131) which would extend the authority for this program for another 2 years.

ENVIRONMENTAL RESTORATION AND WASTE OPERATIONS AT DEPARTMENT OF ENERGY DEFENSE FACILITIES

Environmental Restoration and Waste Management Account

In the Department of Energy budget request for fiscal year 1991, the environmental restoration and waste management functions for the Department were consolidated into one, single appropriation account. Defense and non-defense functions and funding were merged. While the committee understands the Department's desire to maintain a high degree of visibility for expenditures in this area, consolidation of defense and non-defense activities into one appropriation account is not recommended.

The committee has no objection to having the defense and non-defense activities in this area under one program manager, but it strongly objects to consolidating the activities into a single account. Approximately 90 percent of the funding for environmental restoration and waste management is for defense activities funded in the 050 budget account.

The committee has adopted the Department's five activity areas: corrective activities, waste management, environmental restoration, technology development, and program direction, but has separated the defense activities from the non-defense activities in each of these categories. In addition, the committee has retained the program direction category because this has historically been a defense activity.

In keeping with the Department's desire to bring together the funding for the activities under the jurisdiction of a single program manager, the committee has included waste transportation in the technology development category; program direction for waste transportation is included in general program direction. The committee has also included the landlord activities category in the environmental restoration and waste management category to fully reflect the structure of the Department's environmental and waste management program.

Environmental Restoration and Waste Management Funding

In fiscal year 1989, the committee recommended a 40 percent increase in the Department's environmental restoration budget. In fiscal year 1990, although the Department's budget request more than doubled the amount requested in fiscal 1989, the committee again concluded that the request was not adequate. The committee added $239 million over the administration's budget request. In fiscal year 1991, the Department's request increased by $566.5 million, approximately 30 percent over fiscal year 1990. Nevertheless, the Department's budget is again not sufficient to meet its urgent environmental needs. The Environmental Restoration and Waste Management 5-year plan for fiscal years 1992–1996 identifies a verified shortfall for fiscal year 1991 of approximately $258 million for activities within the scope of the 1991–1995 5-year plan for defense and non-defense activities, plus additional shortfalls in the new scope category of the 1992–1996 plan. The committee recommends an increase in defense environmental restoration and waste management of $382 million.

Budget Priorities for Department of Energy Defense Environmental Restoration and Waste Management Programs

Fiscal year 1991 is the third successive year in which the committee has recommended increasing funds for environmental restoration and waste management activities when the overall defense budget is decreasing. Unlike prior years, however, when the additional funding was transferred from DoD to DoE, defense budget constraints have prohibited such a transfer. This year the increase in environmental restoration and waste management activities must be funded from reductions in other areas of the DoE atomic energy defense activities budget.

As the committee indicated last year, the priorities that guide the committee are: (1) compliance with current environmental laws and regulations; (2) cleanup of contaminated sites; and (3) modernization of aging facilities. The committee urges the administration to ensure that adequate funding is requested, including supplemental requests if necessary, to address all of the needs of the DoE defense facilities, or the committee will again have to transfer funds from weapons-related accounts to cleanup accounts.

Environmental Restoration and Waste Management Five-Year Plan

The committee applauds DoE for its environmental restoration and waste management 5-year planning initiative. One aspect of the report however, diminishes its value somewhat. Funding provisions in the report do not distinguish between defense and non-defense activities. Consistent with the recommendations made with respect to the unitary environmental restoration and waste management account, the committee directs DoE to show funding information in the 5-year plan by defense and non-defense activities.

MANAGEMENT OF ENVIRONMENTAL RESTORATION AND CLEANUP ACTIVITIES

The committee is concerned about efforts to transfer management and oversight authority for cleanup and environmental restoration activities at Department of Energy defense complex facilities to the Corps of Engineers or other Federal agencies. Absent demonstration by another Federal agency that its management and oversight ability for nuclear waste cleanup is superior to that of DoE, cleanup and environmental restoration management and oversight responsibility of DoE facilities shall remain with DoE.

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Weapons Activities	4515.936	4756.284	–342.272	4414.012
Operating Expenses	3717.953	4002.365	–251.853	3750.512
Construction	517.878	478.638	–90.419	388.219
Capital Equipment	280.105	275.281	0.000	275.281
Nuclear Materials Production	2126.193	2413.000	–64.100	2348.900
Operating Expenses	1629.869	1961.870	–64.100	1897.770
Construction	393.465	345.508	0.000	345.508
Capital Equipment	102.859	105.622	0.000	105.622
Defense Waste and Environmental Restoration	1634.082	2455.687	511.423	2967.110
Operating Expenses	1420.248	2039.509	381.672	2421.181
Construction	164.460	296.261	129.751	426.012
Capital Equipment	49.374	119.917	0.000	119.917
Verification and Control Technology	167.330	174.000	43.200	217.200
Operating Expenses	158.759	151.484	43.200	194.684
Construction	0.985	12.592	0.000	12.592
Capital Equipment	9.506	9.924	0.000	9.924
Nuclear Safeguards and Security	85.889	91.000	–0.500	90.500
Operating Expenses	81.007	83.934	–0.500	83.434
Construction	0.000	2.000	0.000	2.000
Capital Equipment	4.882	5.066	0.000	5.066
Security Investigations	40.582	65.000	0.000	65.000
Operating Expenses	40.582	65.000	0.000	65.000
New Production Reactors	298.948	363.000	12.000	375.000
Operating Expenses	200.448	132.900	2.000	134.900
Construction	98.500	221.300	10.000	231.300
Capital Equipment	0.000	8.800	0.000	8.800
Naval Reactors Development	642.223	652.000	0.000	652.000
Operating Expenses	554.359	569.200	0.000	569.200
Construction	34.674	27.400	0.000	27.400
Capital Equipment	53.190	55.400	0.000	55.400
TOTAL	9511.183	10969.971	159.751	11129.722
Subtotal, Defense Programs Operating Expenses	7801.225	9006.262	110.419	9116.681
Subtotal, Defense Programs Plant Const. Expenses	1209.962	1383.699	49.332	1433.031
Subtotal, Defense Programs Capital Equipment	500.008	580.010	0.000	580.010
TOTAL, DOE DEFENSE ACTIVITIES	9511.183	10969.971	159.751	11129.722
Operating Expenses				
WEAPONS ACTIVITIES				
Research and Development	1048.995	1062.775	–30.000	1032.775
Nuclear Directed Energy Weapons	(95.545)	(91.211)	(–40.000)	(51.211)
Inertial Confinement Fusion	(162.722)	(157.900)	0.000	(157.900)
Testing	504.024	526.711	–45.000	481.711
Nuclear Directed Energy Weapons	(68.85)	(84.443)	(–40.000)	(44.443)
Production and Surveillance	2068.500	2308.164	–176.853	2131.311
Program Direction	96.434	104.715	0.000	104.715
Weapons Program	(87.520)	(95.514)	0.000	(95.514)
Community Assistance	(8.914)	(9.201)	0.000	(9.201)
Total, Weapons Activities	3717.953	4002.365	–251.853	3750.512

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
NUCLEAR MATERIALS PRODUCTION				
Reactor Operations	568.378	811.457	0.000	811.457
Processing of Nuclear Materials	580.784	628.968	0.000	628.968
Supporting Services	278.625	302.043	0.000	302.043
Enriched Material	166.386	176.901	-64.100	112.801
Program Direction	34.736	42.500	0.000	42.500
Total, Nuclear Materials Production	1628.909	1961.870	-64.100	1897.770
DEFENSE WASTE & ENVIRONMENTAL RESTORATION				
Environmental Restoration	583.420	633.215	178.000	811.215
Waste Operations and Projects	668.201	1137.927	163.672	1301.599
Waste Research and Development	113.497	183.480	54.660	238.140
Corrective Action	39.561	23.348	0.000	23.348
Transportation Management	11.863	14.880	-14.880	0.000
Program Direction	2.908	25.495	0.000	25.495
Program Direction/Landlord	0.000	21.386	0.000	21.386
Total, Waste Transportation & Site Management	1420.248	2039.509	381.672	2421.181
VERIFICATION AND CONTROL TECHNOLOGY				
Verification and Control Technology	158.758	151.484	43.200	194.684
Total, Verification & Control Tech	158.758	151.484	43.200	194.684
NUCLEAR SAFEGUARDS AND SECURITY				
Nuclear Safeguards and Security	81.007	83.934	-0.500	83.434
Total, Nuclear Safeguards and Security	81.007	83.934	-0.500	83.434
SECURITY INVESTIGATIONS	40.582	86.000	0.000	86.000
NEW PRODUCTION REACTORS				
New Production Reactors	200.448	132.800	2.000	134.800
Total, New Prodution Reactors	200.448	132.800	2.000	134.800
NAVAL REACTORS DEVELOPMENT				
Plant Development	85.895	89.300	0.000	89.300
Reactor Development	241.821	258.900	0.000	258.900
Reactor Operation and Evaluation	213.745	207.000	0.000	207.000
Program Direction	13.298	14.000	0.000	14.000
Total, Naval Reactors Development	554.358	569.200	0.000	569.200
SUBTOTAL, DOE DEFENSE ACTIVITIES OPERATING EXPENSES	7801.225	9008.282	110.419	9118.701

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment				
WEAPONS ACTIVITIES				
GPD-101, general plant projects, various locations	27.708	27.100	0.000	27.100
GPD-121, general plant projects, various locations	30.387	36.350	0.000	36.350
91-D-122, short range attack missile tactical (SRAM T) production facilities, various locations	0.000	15.000	0.000	15.000
91-D-123, production assurance transformer replacement, Kansas City Plant, Kansas City, Missouri	0.000	2.600	0.000	2.600
91-D-124, safeguards and security upgrades, Phase III, Mound Facility, Miamisburg, Ohio	0.000	1.100	0.000	1.100
91-D-125, environmental, safety and health upgrades, Phase III, Mound Facility, Miamisburg, Ohio	0.000	1.746	0.000	1.746
91-D-126, health physics calibration facility, Mound Plant, Miamisburg, Ohio	0.000	1.000	0.000	1.000
91-D-127, criticality alarm and production annunciation utility replacement, Rocky Flats Plant, Golden, Colorado	0.000	6.600	0.000	6.600
90-D-102 Nuclear Weapons research, development, and testing facilities revitalization, Phase III, various locations	0.986	19.800	0.000	19.800
90-D-103, environment, safety, and health improvements, various locations	10.540	0.000	0.000	0.000
90-D-122, production capabilities for the nuclear depth/strike bomb (ND/SB), various locations	7.880	13.700	-13.700	0.000
90-D-123, follow on to lance warhead production facilities, various locations	0.000	3.500	-3.500	0.000
90-D-124, high explosives (HE) synthesis facility, Pantex Plant, Amarillo, Texas	1.773	0.000	0.000	0.000
90-D-125, steam plant ash disposal facility, Y-12 Plant, Oak Ridge, Tennessee	1.477	0.000	0.000	0.000
90-D-126, environment, safety, and health enhancements, various locations	26.300	6.500	0.000	6.500
89-D-122, production waste storage facilities, Y-12 Plant, Oak Ridge, Tennessee	9.062	0.000	0.000	0.000

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
WEAPONS ACTIVITIES				
89-D-125, plutonium recovery modification project, Rocky Flats Plant, Golden, Colorado	44.325	85.000	-85.000	0.000
89-D-126, environmental, safety, and health upgrade, Phase II, Mound Plant, Miamisburg, Ohio	3.447	0.488	0.000	0.488
88-D-102, sanitary wastewater systems consolidation, Los Alamos National Laboratory, Los Alamos, New Mexico	3.054	0.000	0.000	0.000
88-D-104, safeguards and security upgrade, Phase II, Los Alamos National Laboratory, Los Alamos, New Mexico	0.985	1.000	0.000	1.000
88-D-105, special nuclear materials research and development laboratory replacement, Los Alamos National Laboratory, Los Alamos, New Mexico	43.340	20.800	0.000	20.800
88-D-106, nuclear weapons research, development, and testing facilities revitalization, Phase II, various locations	82.984	77.547	-5.000	72.547
88-D-122, facilities capability assurance program, various locations	81.853	131.806	-3.219	128.587
88-D-123, security enhancements, Pantex Plant, Amarillo, Texas	5.417	18.244	0.000	18.244
88-D-124, fire protection upgrade, various locations	5.318	1.481	0.000	1.481
88-D-125, high explosive machining facility, Pantex Plant, Amarillo, Texas	35.480	8.840	0.000	8.840
88-D-126, personnel radiological monitoring laboratories, various locations	0.000	1.800	0.000	1.800
87-D-104, safeguards and security enhancement II, Lawrence Livermore National Laboratory, Livermore, California	8.886	0.000	0.000	0.000
87-D-122, short-range attack missile II (SRAM II) warhead production facilities, various locations	40.582	8.834	0.000	8.834
86-D-103, decontamination and waste treatment facility, Lawrence Livermore National Laboratory, Livermore, California	5.122	0.000	0.000	0.000
86-D-130, tritium loading facility replacement, Savannah River Plant, Aiken, South Carolina	23.985	2.380	0.000	2.380
85-D-105, combined device assembly facility, Nevada Test Site, Nevada	9.318	4.242	0.000	4.242
Total, Weapons Activities	517.878	478.636	-90.418	388.218

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
NUCLEAR MATERIALS PRODUCTION				
GPD-146, general plant projects, various locations	36.250	36.894	0.000	36.894
91-D-143, increase 751-A electrical substation capacity, Phase I, Savannah River, South Carolina	0.000	6.000	0.000	6.000
91-D-145, new whole body counter facility, Savannah River, South Carolina	0.000	4.350	0.000	4.350
91-D-148, reactor charge/discharge training simulator, Savannah River, South Carolina	0.000	2.000	0.000	2.000
90-D-141, Idaho chemical processing plant fire protection, Idaho National Engineering Laboratory, Idaho	3.447	6.000	0.000	6.000
90-D-142, coal storage facility environmental upgrade, Feed Materials Production Center, Fernald, Ohio	0.908	0.000	0.000	0.000
90-D-143, plutonium finishing plant fire safety and loss limitation, Richland, Washington	0.788	2.500	0.000	2.500
90-D-149, plantwide fire protection, Phases I and II, Savannah River, South Carolina	4.828	49.100	0.000	49.100
90-D-150, reactor safety assurance, Phases I and II, Savannah River, South Carolina	12.500	32.600	0.000	32.600
90-D-151, engineering center, Savannah River, South Carolina	6.085	4.000	0.000	4.000
89-D-140, additional separations safeguards, Savannah River, South Carolina	10.148	18.300	0.000	18.300
89-D-141, M area waste disposal, Savannah River, South Carolina	7.883	0.000	0.000	0.000
89-D-142, reactor effluent cooling water thermal mitigation, Savannah River, South Carolina	39.400	0.000	0.000	0.000
89-D-146, improved reactor confinement system, Savannah River, South Carolina	6.984	12.600	0.000	12.600
88-D-153, additional reactor safeguards, Savannah River, South Carolina	8.304	1.000	0.000	1.000
87-D-159, environmental, health, and safety improvements, Phases I, II, III, IV, and V, Feed Materials Production Center, Fernald, Ohio	54.294	14.133	0.000	14.133
86-D-148, special isotope separation project, Idaho Falls, Idaho	38.400	0.000	0.000	0.000

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
NUCLEAR MATERIALS PRODUCTION				
86-D-148, productivity retention program, Phases I, II, III, IV, V, and VI, various locations	80.553	81.750	0.000	81.750
86-D-152, reactor electrical distribution system, Savannah River, South Carolina	3.117	0.000	0.000	0.000
86-D-156, plantwide safeguards systems, Savannah River, South Carolina	6.088	0.000	0.000	0.000
85-D-139, fuel processing restoration, Idaho Fuels Processing Facility, Idaho National Engineering Laboratory, Idaho	73.875	87.500	0.000	87.500
85-D-145, fuel production facility, Savannah River, South Carolina	0.000	8.481	0.000	8.481
Total, Nuclear Materials Production	393.465	345.508	0.000	345.508
DEFENSE WASTE & ENVIRONMENTAL RESTORATION				
90-D-170, general plant projects, various locations	28.800	0.000	0.000	0.000
GPD-171, general plant projects, various locations	0.000	13.558	0.000	13.558
91-D-170, Idaho National Engineering Laboratory transportation complex, Idaho	0.000	0.870	0.000	0.870
91-D-175, 300 area electrical distribution conversion and safety improvements, Phase I, Richland, Washington	0.000	0.900	0.000	0.900
90-D-171, laboratory ventilation and electrical system upgrade, Richland, Washington	1.063	0.000	0.000	0.000
90-D-172, aging waste transfer lines, Richland, Washington	1.200	0.000	0.000	0.000
90-D-173, B plant canyon crane replacement, Richland, Washington	1.477	0.000	0.000	0.000
90-D-174, decontamination laundry facility, Richland, Washington	2.758	0.000	0.000	0.000
90-D-175, landlord program safety compliance-I, Richland, Washington	4.137	8.230	0.000	8.230
90-D-176, transuranic (TRU) waste facility, Savannah River, South Carolina	3.063	0.000	0.000	0.000
90-D-177, RWMC transuranic (TRU) waste treatment and storage facility, Idaho National Engineering Laboratory, Idaho Falls, Idaho	4.825	0.000	0.000	0.000

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
DEFENSE WASTE & ENVIRONMENTAL RESTORATION				
90-D-178, TSA retrieval containment building, Idaho National Engineering Laboratory, Idaho Falls, Idaho	5.910	0.000	0.000	0.000
89-D-171, Idaho National Engineering Laboratory road renovation, Idaho	7.288	7.300	0.000	7.300
89-D-172, Hanford environmental compliance, Richland, Washington	27.186	0.000	0.000	0.000
89-D-173, tank farm ventilation upgrade, Richland, Washington	15.169	0.000	0.000	0.000
89-D-174, replacement high-level waste evaporator, Savannah River, South Carolina	9.220	0.000	0.000	0.000
89-D-175, hazardous waste/mixed waste disposal facility, Savannah River, South Carolina	6.343	0.000	0.000	0.000
88-D-173, Hanford waste vitrification plant, Richland, Washington	28.684	0.000	0.000	0.000
87-D-173, 242-A evaporator crystallizer upgrade, Richland, Washington	0.690	0.000	0.000	0.000
87-D-181, diversion box and pump pit containment buildings, Savannah River, South Carolina	2.748	0.000	0.000	0.000
83-D-148, non-radioactive hazardous waste management, Savannah River, South Carolina	13.928	0.000	0.000	0.000
91-GDP-171 General Plant Projects, various locations	0.000	50.133	0.000	50.133
91-D-125, environmental, safety, and health upgrades, Phase III, Mound Plant, Miamisburg, Ohio	0.000	0.284	0.000	0.284
91-D-171, waste receiving and processing facility module 1, Richland, Washington	0.000	2.700	0.000	2.700
91-D-172, high-level waste tank farm replacement, Idaho Chemical Processing Plant, Idaho National Engineering Laboratory, Idaho	0.000	13.000	0.000	13.000
91-D-173, hazardous low-level waste processing tanks, Savannah River, South Carolina	0.000	5.800	0.000	5.800
90-D-103, environment, safety, and health improvements, various locations	0.000	4.200	0.000	4.200
90-D-125, steam plant ash disposal facility, Y-12 Plant, Oak Ridge, Tennessee	0.000	8.000	0.000	8.000

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
DEFENSE WASTE & ENVIRONMENTAL RESTORATION				
90-D-171, laboratory ventilation and electrical system upgrade, Richland, Washington	0.000	4.100	0.000	4.100
90-D-172, aging waste transfer lines, Richland, Washington	0.000	4.000	0.000	4.000
90-D-173, B plant canyon crane replacement, Richland, Washington	0.000	4.300	0.000	4.300
90-D-174, decontamination laundry facility, Richland, Washington	0.000	9.900	0.000	9.900
90-D-175, landlord program safety compliance-I, Richland, Washington	0.000	2.640	0.000	2.640
90-D-176, transuranic (TRU) waste facility, Savannah River, South Carolina	0.000	15.300	0.000	15.300
90-D-177, RWMC transuranic (TRU) waste treatment and storage facility, Idaho National Engineering Laboratory, Idaho Falls, Idaho	0.000	28.000	0.000	28.000
90-D-178, TSA retrieval containment building, Idaho National Engineering Laboratory, Idaho Falls, Idaho	0.000	11.100	0.000	11.100
89-D-122, production waste storage facilities, Y-12 Plant, Oak Ridge, Tennessee	0.000	5.500	0.000	5.500
89-D-126, environmental, safety, and health upgrade, Phase II, Mound Plant. Miamisburg, Ohio	0.000	1.723	0.000	1.723
89-D-141, M-area waste disposal, Savannah River, South Carolina	0.000	7.500	0.000	7.500
89-D-142, reactor effluent cooling water thermal mitigation, Savannah River, South Carolina	0.000	44.600	0.000	44.600
89-D-172, Hanford environmental compliance, Richland, Washington	0.000	42.460	0.000	42.460
89-D-173, tank farm ventilation upgrade, Richland, Washington	0.000	3.400	0.000	3.400
89-D-174, replacement high-level waste evaporator, Savannah River, South Carolina	0.000	11.330	0.000	11.330
89-D-175, hazardous waste/mixed waste disposal facility, Savannah River, South Carolina	0.000	7.800	0.000	7.800

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
DEFENSE WASTE & ENVIRONMENTAL RESTORATION				
88-D-102, sanitary wastewater systems consolidation, Los Alamos National Laboratory, Los Alamos, New Mexico	0.000	3.500	0.000	3.500
88-D-173, Hanford waste vitrification plant, Richland, Washington	0.000	75.500	0.000	75.500
87-D-159, environmental, health, and safety improvements, Phases I, II, III, & IV, Feed Materials Production Center, Fernald, Ohio	0.000	27.586	0.000	27.586
83-D-148, non-radioactive hazardous waste management, Savannah River, South Carolina	0.000	5.000	0.000	5.000
Program slippage		-129.751	129.751	0.000
Total, Defense Waste & Environmental Restoration	184.480	296.261	129.751	426.012
VERIFICATION AND CONTROL TECHNOLOGY				
91-D-182, foreign technology assessment center, Lawrence Livermore National Laboratory, Livermore, California	0.000	2.592	0.000	2.592
90-D-186, center for national security and arms control, Sandia National Laboratories, Albuquerque, New Mexico	0.986	10.000	0.000	10.000
Total, Verification & Control Technology	0.986	12.592	0.000	12.592
NUCLEAR SAFEGUARDS AND SECURITY				
GPD-186, general plant projects, Central Training Academy, Albuquerque, New Mexico	0.000	2.000	0.000	2.000
NEW PRODUCTION REACTOR				
88-D-154, new production reactor capacity, various locations	98.500	221.300	10.000	231.300
NAVAL REACTORS DEVELOPMENT				
GPN-101, general plant projects, various locations	8.373	8.600	0.000	8.600
90-N-102, expended core facility dry cell project, Naval Reactors Facility, Idaho	3.548	4.000	0.000	4.000

Program	FY 1990 Appropriation Conference	FY 1991 Authorization Request	FY 1991 Senate Change	FY 1991 Senate Authorization
Plant and Capital Equipment continued				
NAVAL REACTORS DEVELOPMENT				
90-N-103, advanced test reactor off-gas treatment system, Idaho National Engineering Laboratory, Idaho	0.197	1.800	0.000	1.800
90-N-104, facilities renovation, Knolls Atomic Power Laboratory, Niskayuna, New York	3.842	7.900	0.000	7.900
89-N-102, heat transfer test facility, Knolls Atomic Power Laboratory, Niskayuna, New York	8.403	3.600	0.000	3.600
89-N-103, advanced test reactor modifications, Test Reactor Area, Idaho National Engineering Laboratory, Idaho	3.054	0.000	0.000	0.000
88-N-104, power system upgrade, Naval Reactors Facility, Idaho	8.304	0.000	0.000	0.000
88-N-102, expended core facility receiving station, Naval Reactors Facility, Idaho	2.856	1.500	0.000	1.500
Total, Naval Reactors Development	34.874	27.400	0.000	27.400
SUBTOTAL, DOE DEFENSE ACTIVITIES PLANT CONSTRUCTION	1209.962	1383.699	49.332	1433.031
CAPITAL EQUIPMENT				
Weapons Activities	280.105	275.281	0.000	275.281
Nuclear Directed Energy Weapons	(5.910)	(11.250)	0.000	(11.250)
Inertial Confinement Fusion	(8.808)	(8.900)	0.000	(8.900)
Nuclear Materials Production	102.858	105.822	0.000	105.822
Defense Waste & Environmental Restoration	48.374	119.817	0.000	119.817
Verification and Control Technology	6.586	9.824	0.000	9.824
Nuclear Safeguards and Security	4.092	5.066	0.000	5.066
New Production Reactors	0.000	8.800	0.000	8.800
Naval Reactors Development	53.190	55.400	0.000	55.400
SUBTOTAL, DOE DEFENSE ACTIVITIES CAPITAL EQUIPMENT	500.006	580.010	0.000	580.010
Subtotal, DOE Operating Expenses	7801.225	9006.262	110.419	9116.681
Subtotal, DOE Plant Construction	1209.962	1383.699	49.332	1433.031
Subtotal, DOE Capital Equipment	500.006	580.010	0.000	580.010
Total, DOE	9511.193	10969.971	159.751	11129.722

TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD

The Defense Nuclear Facilities Safety Oversight Board was established by section 311 of the National Defense Authorization Act for Fiscal Year 1989. The Board is responsible for making recommendations to the Secretary of Energy with respect to the operation, standards, research, and design of certain Department of Energy facilities as the Board determines necessary to provide adequate protection of public health and safety. The Board has been hampered in its ability to carry out its directives by an inability to hire qualified senior individuals who are well-grounded in one or more technical fields. The committee recommends a provision that would extend the hiring flexibility in the Atomic Energy Act to the Board.

TITLE XXXIII—CIVIL DEFENSE

The amended defense budget request for fiscal year 1991 for civil defense activities in the Federal Emergency Management Agency (FEMA) is $154.117 million, an increase of approximately $6 million over the fiscal year 1990 appropriated amount.

The committee recommends a reduction of $10 million to the requested amount. The committee recommends this reduction for budgetary reasons and in recognition of the reduced likelihood of strategic nuclear conflict.

FEMA CIVIL DEFENSE AUTHORIZATION FY 91

P-1/R-1 LINE	ITEM	FY 90 ESTIMATE	FY 91 REQUEST	SENATE CHANGE	SENATE AUTHORIZ.
	CIVIL DEFENSE				
	STATE AND LOCAL EMERGENCY MANAGEMENT	66,442	66,348	0	66,348
	RADIOLOGICAL DEFENSE	12,407	13,270	0	13,270
	POPULATION PROTECTION	16,134	17,732	0	17,732
	S & L DIRECTION, CONTROL AND WARNING	13,782	17,076	0	17,076
	RESEARCH	1,164	1,211	0	1,211
	TRAINING AND EDUCATION	14,388	14,213	0	14,213
	TELECOMMUNICATIONS AND WARNING	24,439	23,781	0	23,781
	AUTOMATIC DATA PROCESSING (S&E)	540	508	0	506
	GENERAL REDUCTION			(10,000)	(10,000)
	TOTAL	149,297	154,117	(10,000)	144,117

TITLE XXXIV—PANAMA CANAL COMMISSION

The purpose of this title is to authorize expenditures from the Panama Canal Revolving Fund for the operation and maintenance of the Panama Canal and to make several improvements to the Panama Canal Act of 1979 (Public Law 96–70).

Appropriated funds are not utilized to operate and maintain the Panama Canal; it operates on a self-sustaining basis. Only toll monies and other revenues paid by users of the Panama Canal are authorized to be expended, as well as borrowing authority already authorized by law. Under existing law, however, an authorization of obligations and expenditures by the Panama Canal Commission is required, even though an appropriation of funds is no longer required. The committee has reviewed the Panama Canal Commission's detailed justification of programs and estimates for the upcoming fiscal year.

The committee takes note that Operation Just Cause has restored constitutional democratic government to Panama. The committee also notes that, pursuant to the provisions of the Panama Canal Treaty, the President has nominated and the committee has recommended to the Senate that Mr. Gilberto Guardia Fabrega be confirmed as the first Panamanian Administrator of the Panama Canal Commission. As far as can be determined, Mr. Guardia, if confirmed, will be the first foreign national to be confirmed by the United States Senate.

As previously noted, this title would also make several improvements to the Panama Canal Act of 1979. In particular, it would increase the level of compensation for the nine members of the Panama Canal Board of Directors; allow the Deputy Administrator and Chief Engineer of the Panama Canal Commission to receive the recruitment and retention remuneration pay; attempt to retain skilled employees of the Commission in the workforce until the end of the century by allowing those hired after September 30, 1979, to participate in the Commission's early retirement system; and make a technical change in the Panama Canal Compensation Fund Act of 1988.

DEPARTMENTAL RECOMMENDATIONS

By letter dated February 22, 1990, the General Counsel of the Department of Defense forwarded to the President of the Senate proposed legislation "To authorize appropriations for fiscal year 1991 for military functions of the Department of Defense and to prescribe military personnel levels for such Department for fiscal year 1991, and for other purposes." The transmittal letter and proposed legislation were officially referred as Executive Communication 2457 to the Committee on Armed Services on March 5, 1990. Senators Nunn and Warner introduced this legislative proposal as S. 2171, by request, on February 26, 1990. The statement made by Senator Nunn upon introduction of S. 2171, together with the text of the legislation, appear in the *Congressional Record* of February 26, 1990 on pages S1616–1618.

By letter dated February 8, 1990, the Secretary of Defense forwarded to the President of the Senate proposed legislation "To authorize certain construction at military installations for fiscal year 1991, and for other purposes." The transmittal letter and proposed legislation were officially referred as Executive Communication 2348 to the Committee on Armed Services on February 21, 1990. Senators Nunn and Warner introduced this legislative proposal as S. 2172, by request, on February 26, 1990. The statement made by Senator Nunn upon introduction of S. 2172, together with the text of the legislation, appear in the *Congressional Record* of February 26, 1990 on pages S1618–1626.

By letter dated February 27, 1990, the Acting General Counsel of the Federal Emergency Management Agency forwarded to the President of the Senate proposed legislation "To authorize appropriations for fiscal year 1991 to implement the Federal Civil Defense Act of 1950." The transmittal letter and proposed legislation were officially referred as Executive Communication 2543 to the Committee on Armed Services on March 20, 1990. Senators Nunn and Warner introduced this legislative proposal as S. 2339, by request, on March 27, 1990. The statement made by Senator Nunn upon introduction of S. 2339, together with the text of the legislation, appear in the *Congressional Record* of March 27, 1990 on page S3284.

COMMITTEE ACTION

In accordance with the Legislative Reorgainzation Act of 1946, as amended by the Legislative Reorgainzation Act of 1970, there is set forth below the committee vote to report the National Defense Authorization Act for Fiscal Year 1991.

In favor: Senators Nunn, Exon, Levin, Kennedy, Bingaman, Dixon, Glenn, Gore, Wirth, Shelby, Byrd, Warner, Thurmond, Cohen, Wilson, McCain, Wallop, Gorton, Lott, and Coats.

Opposed: None.

Vote: 20–0.

The other roll call votes on amendments to the bill which were considered during the course of the mark-up have been made public and are available at the committee.

FISCAL DATA

Section 252 of the Legislative Reorgainzation Act of 1970 (Public Law 91–510) requires that the report accompanying each bill reported by a Senate committee contain certain information on five-year cost projections.

The letter received in compliance with this statutory requirement is shown below. The bill is an annual authorization and does not, within its own terms, generate costs beyond fiscal year 1991, even though the funds authorized to be obligated by this act may not be expended for several years in the future. The fiscal year authorizations herein provided are reviewed annually by the committee and the Congress.

COMPTROLLER OF THE DEPARTMENT OF DEFENSE
WASHINGTON DC 20301-1100

APR 2 1990

Honorable Sam Nunn
Chairman, Committee on Armed Services
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

In accordance with Section 252 of the Legislative Reorganization Act of 1970 (P.L. 91-510), the chart below provides an estimate of how appropriations attendant to the FY 1991 Authorization Request will expend.

Estimated Expenditures
($ in Millions)

FY 1991 Request:	$216,362
FY 1991	131,981
FY 1992	41,758
FY 1993	22,718
FY 1994	9,304
FY 1995	4,327
Beyond	6,274

Cordially,

Sean O'Keefe
Comptroller

CONGRESSIONAL BUDGET OFFICE
U.S. CONGRESS
WASHINGTON, D.C. 20515

Robert D. Reischauer
Director

July 19, 1990

Honorable Sam Nunn
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The Congressional Budget Office has prepared the attached cost estimate on the National Defense Authorization Act for Fiscal Year 1991, as ordered reported by the Senate Committee on Armed Services, on July 13, 1990.

Should the Committee so desire, we would be pleased to provide further details on the attached cost estimate.

Sincerely,

Robert D. Reischauer

cc: Honorable John W. Warner
Ranking Minority Member

Congressional Budget Office
Cost Estimate

July 19, 1989

1. BILL NUMBER: Unassigned

2. BILL TITLE:

   National Defense Authorization Act for Fiscal Year 1991

3. BILL STATUS:

   As ordered reported by the Senate Committee on Armed Services on July 13, 1990.

4. BILL PURPOSE:

   This bill authorizes appropriations for 1991 for the military functions of the Department of Defense, the Department of Energy, and the Federal Emergency Management Agency. This bill also prescribes authorized personnel strengths for each active duty and selected reserve component. The activities covered by this bill affect many budget functions.

5. ESTIMATED COST TO THE FEDERAL GOVERNMENT:

   This bill would entail costs to the federal government in 1991-1995, as shown in the following tables.

Basis for Estimate:

All estimates assume that funds will be appropriated for the full amount of the authorization and will be available for obligation by October 1, 1990, unless otherwise specified. Outlays are estimated based on historical outlay rates.

Direct Spending

The bill contains a mix of direct spending provisions and authorizations requiring appropriations action. The direct spending occurs because of five sets of provisions. First, the bill extends authorizations for military construction projects included in previous authorization bills. Almost all such projects have been funded in appropriation acts, but have not been completed because authorizations expire at the end of 1990. Upon enactment of this bill, the Defense Department could execute the projects; thus, outlays could occur in 1990. CBO assumes enactment late enough in 1990 that no outlays will occur then, but outlays of $54 million will occur in 1991.

Second, the bill allows the DoD to use the proceeds from the disposal of property to acquire other property. No further appropriations action is required. Budget authority in 1991 from these provisions nets to zero; although outlays also net to zero over time, receipts in 1991 exceed expenditures by $1 millio

TABLE 1. ESTIMATED COSTS OF THE NATIONAL DEFENSE AUTHORIZATION ACT, 1991, AS REPORTED BY THE SENATE ARMED SERVICES COMMITTEE (By fiscal year, in millions of dollars)

Category	1991	1992	1993	1994	1995
Direct Spending					
Estimated Budget Authority	132	138	142	133	19
Estimated Outlays	261	515	654	837	972
Amount Subject to Appropriations					
Stated Authorizations					
Authorization Level	208,552	0	0	0	0
Estimated Outlays	106,862	51,905	26,609	11,303	4,645
Estimated Authorizations					
Estimated Auth. Level	78,372	82,379	84,894	87,440	87,761
Estimated Outlays	49,861	62,492	64,033	65,851	65,630
Subtotal-Authorizations					
Estimated Auth. Level	286,924	82,379	84,894	87,440	87,761
Estimated Outlays	156,723	114,397	90,642	77,154	70,275
Bill Total					
Estimated BA/Auth. Level	287,056	82,517	85,036	87,573	87,780
Estimated Outlays	156,984	114,912	91,296	77,991	71,247

Totals may not add due to rounding.

Third, the bill would allow former servicemembers who qualify for unemployment compensation to be eligible for 26 weeks of payments and would enable them to apply for such payments at the end of one week of unemployment. Current law restricts the payment period to 13 weeks and requires a four-week waiting period. This proposal would increase costs by about 70 percent compared to the amount spent annually for the current benefit. (Unemployment compensation costs are not expected to increase in proportion to the increase in the payment period because current evidence indicates many recipients find employment before the end of their payment eligibility.)

The cost to DoD for providing the current benefit is about $130 million annually. This amount pays for the benefits of individuals who completed their first term of service but did not reenlist, or were separated from military service primarily for reasons of hardship or unfitness of duty. Few such individuals would qualify for the other involuntary separation benefits provided by this bill, but they would receive the increased unemployment benefit. Thus, the bill would increase costs by $90 million annually for this group. In addition, servicemembers who are separated as a result of force reductions would also be eligible for unemployment benefits. Approximately

Fourth, the bill contains provisions that would raise the number of people retiring each year during the 1991-1995 period. Spending from the military retirement trust fund would rise by about $73 million in 1991 and about $804 million in 1995 due to the personnel management provisions and strength reductions implicit in the bill.

Finally, section 643 would allow certain individuals to receive veterans' benefits. Specifically, it would allow those members of the armed services who are involuntarily separated and not enrolled in either the Chapter 30 or 32 education benefits program to contribute $1,200 to be eligible for Chapter 30 benefits. CBO estimates that this provision would increase budget authority and outlays in the Readjustment Benefits account by $1 million in fiscal year 1991 growing to $7 million in fiscal year 1995. This provision also would increase collections in the Veterans' Educational Assistance offsetting receipt account. CBO estimates that offsetting receipts would increase $300,000 in fiscal year 1991.

Amounts Subject to Appropriations

The bill states the amount of authorizations for appropriations for several accounts totaling about $209 billion for 1991. The bill reduces certain authorizations provided in an earlier Act for 1991 by about $133 million (see Table 3). The bill also contains two provisions representing undistributed reductions to military personnel accounts--$180 million and O&M--$300 million. These reductions would lower outlays by $404 million in 1991. In addition, the bill contains provisions that affect several budget functions and that require CBO to estimate cost impacts for 1991 and the outyears. Table 4 shows these costs.

The bill authorizes personnel strengths for active and reserve components for 1991 and 1995. Section 402 of the bill establishes a uniform process for reducing end strengths between 1991 and 1995 to minimize involuntary separations of career personnel. The process relies on attrition, early retirements, and separations of more junior personnel before allowing involuntary separations of mid-career personnel in the transition to the 1995 level. This provision would cause the bulk of involuntary separations to occur in the later years of the 1991-1995 period. The estimates shown in Table 4 for 1991 and 1995 are based on authorizations stated in the bill. Estimates for 1992-1994 are based on CBO estimates of the transition from the personnel strengths for 1991 to those of 1995.

The bill would provide severance payments for certain enlisted members of the Armed Forces who are involuntarily separated, as well as increase similar payments made to officers under current law. When the size of the force is not changing, most involuntary separations involve individuals who have completed some maximum number of years of service without being promoted to a certain grade. This estimate assumes that approximately 2,000 officers and 1,400 enlisted personnel are separated involuntarily annually under these conditions, as has been the case in the recent past. In addition, further involuntary separations of individuals who qualify for severance payments will occur in 1992-1995 in line with the authorized 1995 end strengths.

Under current law, officer severance payments are calculated with a formula based on pay grade and years of service. The maximum payment that any individual may receive is $30,000, however. Most separations currently involve officers at pay grade 0-3 with between 9 and 12 years of service. According to the formula, the severance payment for such individuals averages $36,100 per person. Because of the existing limitation, however, they

TABLE 3. STATED AUTHORIZATIONS IN THE NATIONAL DEFENSE AUTHORIZATION ACT, 1991, AS REPORTED BY THE SENATE ARMED SERVICES COMMITTEE (By fiscal year, in millions of dollars)

Category	1991	1992	1993	1994	1995
Procurement					
Authorization Level	65,306	0	0	0	0
Estimated Outlays	10,514	17,051	19,098	8,817	3,909
RDT&E					
Authorization Level	36,450	0	0	0	0
Estimated Outlays	18,939	13,034	2,984	657	387
O&M					
Authorization Level	86,086	0	0	0	0
Estimated Outlays	66,723	15,047	2,396	1,192	50
Military Construction					
Authorization Level	8,552	0	0	0	0
Estimated Outlays	3,205	2,977	1,362	547	247
Stock Funds					
Authorization Level	1,484	0	0	0	0
Estimated Outlays	558	523	254	111	63
Atomic Energy Defense Activities					
Authorization Level	11,143	0	0	0	0
Estimated Outlays	7,246	3,340	557	0	0
Civil Defense					
Authorization Level	144	0	0	0	0
Estimated Outlays	87	37	16	4	0
Amendment of Prior Year Authorization					
Authorization Level	-133	0	0	0	0
Estimated Outlays	-6	-43	-50	-21	-11
Military Personnel and O&M Limitation					
Authorization Level	-480	0	0	0	0
Estimated Outlays	-404	-61	-8	-4	-0
Total					
Authorization Level	208,552	0	0	0	0
Estimated Outlays	106,862	51,905	26,609	11,303	4,645

currently receive $30,000. This bill would remove this threshold so that officers would receive the full amount of the payment under the current formula. Thus, the cost of this provision assuming 2,000 involuntarily separated officers is $12 million per year. When additional involuntary separations of officers occur in 1992 through 1995, further costs will result. This estimate assumes that such separations will occur among officers with between 5 and 14 years of service and will average $30,000 per person. Thus, officer severance payments will cost approximately $20 million in 1995 for 600 involuntary separated officers and will increase to $250 million by 1994, assuming 8,300 such separations occur in that year. The average payment for these officers would not greatly exceed the $30,000 current law ceiling, but some individual payments would exceed it. Thus, about 20 percent of officer severance costs in 1992-1995 in this estimate are attributable to the effect of lifting the current ceiling.

Enlisted personnel who are separated involuntarily do not receive severance payments under current law. This bill would provide such payments, using the same formula currently in effect for officer severance payments. Currently, about 1,400 enlisted personnel in pay grades E-4 and E-5 who would qualify for severance pay are separated involuntarily each year. Payments for these individuals would average $16,600 for a total cost of $23 million annually. As with officers, involuntary separations of enlisted personnel would be required beginning in 1992 in order to achieve the authorized 1995 end strength. Assuming that such separations would be distributed among individuals with between 5 and 14 years of service, payments averaging $17,000 would be made to 13,000 individuals in 1992 at a cost of $220 million. Involuntary separations of enlisted personnel would peak in 1994 with expenditures of $1.2 billion for approximately 65,000 such separations in that year.

Section 642 would provide temporary medical benefits for certain involuntarily separated servicemembers and their dependents by paying health insurance costs for these individuals for six months. In addition, coverage would be provided for any pre-existing conditions not included in this coverage. Assuming costs are comparable to the premium charged for current insurance coverage offered to former servicemembers, this proposal would cost about $800 per separation. Approximately 35,000 individuals would qualify for this coverage in 1991, at a cost of $65 million. Costs would increase to $145 million by 1994 as annual separations due to force reductions increase.

The bill would impose a limitation on funding for Permanent Change of Station (PCS) moves for military personnel that is $200 million below the amount in the Administration's request.

Section 613 would increase the special pay received by certain reserve medical officers by $15 per drill. Approximately 30,000 such officers who typically complete 48 drills annually would qualify for this payment for a total cost of $20 million annually. The bill would also establish or increase incentive payments to optometrists, podiatrists, and certain nurses for a total cost of $15 million annually.

The bill lowers the existing ceiling on the number of troops stationed in Europe by 50,000. Reducing overseas troop strength lowers costs to the Department of Defense even if overall end strength is not reduced because of the overseas pay and additional transportation costs associated with those personnel. Thus, this provision would lower authorizations by about $50 million in 1991.

The bill also reduces the proportion of senior level civilian employees by 20 percent over five years beginning in 1991. This provision would result in annual savings of $18 million by 1995, assuming reductions are phased in evenly.

Title VIII of the bill focuses on acquisition policy and management and contains several provisions with a budget impact. First, the bill would waive the current prohibition against dual compensation for 1,250 employees. Dual compensation refers to cases where a person receiving a federal retirement annuity is employed by the government in another capacity. Current law restricts the amount of combined compensation such persons may receive. This bill would raise budget costs by about $20 million per year. Second, the bill would establish a Critical Technologies Institute, a student loan repayment program, and an advisory board for improvements in defense laboratories. The combined cost of these programs is about $10 million per year. Title VIII contains other provisions with little or no costs.

Functions other than 050 are affected by provisions in this bill. The bill authorizes an end strength of 12,700 for the Coast Guard Reserve with costs of $61 million in 1991; the associated costs fall under budget function 400 (See Table 4).

Title XXXIII would authorize the Panama Canal Commission (function 400) to spend any sums available to it from operating revenues or Treasury borrowing for operation, maintenance, and improvement of the canal in fiscal year 1991. CBO estimates that 1991 collections will be about $490 million. Obligations for the year are projected to be about $499 million, with the shortfall of approximately $8 million being covered by Treasury borrowings.

The military and civilian end strengths authorized by this bill affect estimated contributions to the Old-Age and Survivors Insurance Trust Fund the Disability Insurance Trust Fund (both in function 650) and the Hospital Insurance Trust Fund (function 570). The employer's share of the old-age, survivors, and disability insurance contribution for DoD military and civilian employees totals about $3.7 billion while contributions for hospital insurance would be approximately $0.6 billion in 1991.

Function 600--income security--records the accrual amounts for the military retirement trust fund and various amounts associated with civil service retirement. The military end strengths authorized in this bill have a retirement accrual cost of $16.2 billion. The employer contribution for civil service retirement adds about $2.9 billion to function 600.

Authorizations of about $48 million were included for construction, operations and maintenance of the Soldiers' and Airmen's Home (function 700). This amount equals the President's request and outlays were calculated assuming the mix of activities included in that request.

Finally, function 950--undistributed offsetting receipts--records offsets to the accrual payments from function 050 associated with military retirement, and employer contributions to the social insurance funds. Function 950 also shows the offsets from civil service retirement contributions associated with DoD's civilian employees for whom funding is authorized in this bill.

TABLE 4. ESTIMATED AUTHORIZATIONS IN THE NATIONAL DEFENSE AUTHORIZATION ACT, 1991, AS REPORTED BY THE SENATE ARMED SERVICES COMMITTEE (By fiscal year, in millions of dollars)

Category	1991	1992	1993	1994	1995
Function 050					
End strengths					
Estimated Authorization	77,714	80,066	81,083	81,813	82,531
Estimated Outlays	73,840	79,949	81,032	81,777	82,495
Severance Payments					
Estimated Authorization Level	35	280	800	1,670	570
Estimated Outlays	33	268	774	1,627	625
Other Separation Benefits					
Estimated Authorization Level	65	85	120	160	50
Estimated Outlays	62	84	118	158	55
PCS Limitation					
Estimated Authorization Level	-200	0	0	0	0
Estimated Outlays	-190	-10	0	0	0
Medical Special Pays					
Estimated Authorization Level	35	35	35	35	40
Estimated Outlays	33	35	35	35	40
European Troop Strength					
Estimated Authorization Level	-50	-105	-110	-110	-115
Estimated Outlays	-48	-102	-110	-110	-115
Other 050					
Estimated Authorization Level	4	22	19	16	12
Estimated Outlays	1	23	20	16	12
Function 050 Total					
Estimated Authorization Level	77,603	80,383	81,947	83,584	83,088
Estimated Outlays	73,732	80,246	81,870	83,502	83,113
Function 400					
Estimated Authorization Level	61	0	0	0	0
Estimated Outlays	59	2	0	0	0
Function 570					
Estimated Authorization Level	619	192	232	270	309
Estimated Outlays	0	0	0	0	0

(Continued)

TABLE 4. Continued

Category	1991	1992	1993	1994	1995
Function 600					
Estimated Authorization Level	20,144	16,703	17,493	18,015	18,462
Estimated Outlays	0	0	0	0	0
Function 650					
Estimated Authorization Level	3,862	2,863	3,065	3,224	3,385
Estimated Outlays	0	0	0	0	0
Function 700					
Estimated Authorization Level	48	0	0	0	0
Estimated Outlays	35	6	6	2	0
Function 950					
Estimated Authorization Level	-23,965	-17,762	-17,843	-17,653	-17,483
Estimated Outlays	-23,965	-17,762	-17,843	-17,653	-17,483
Total Estimated Authorizations					
Estimated Authorization Level	78,372	82,379	84,894	87,440	87,761
Estimated Outlays	49,861	62,492	64,033	65,851	65,630

6. ESTIMATED COST TO STATE AND LOCAL GOVERNMENT: None

7. ESTIMATE COMPARISON: None

8. PREVIOUS CBO COST ESTIMATE: None

9. ESTIMATE PREPARED BY:

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10. ESTIMATE APPROVED BY:

James L. Blum
Assistant Director
for Budget Analysis

TABLE 2. DIRECT SPENDING PROVISIONS IN THE NATIONAL DEFENSE AUTHORIZATION ACT, 1991, AS REPORTED BY THE SENATE ARMED SERVICES COMMITTEE (By fiscal year, in millions of dollars)

Category	1991	1992	1993	1994	1995
Authorization Extensions					
Estimated Budget Authority	0	0	0	0	0
Estimated Outlays	54	132	70	29	15
Use of Proceeds					
Estimated Auth. Level	0	0	0	0	0
Estimated Outlays	-1	1	0	0	0
Expanded Unemployment Benefits					
Estimated Budget Authority	135	151	178	207	146
Estimated Outlays	135	151	178	207	146
Additional Military Retirements					
Estimated Budget Authority	-3	-15	-39	-79	-134
Estimated Outlays	73	229	403	596	804
Veterans' Benefits					
Estimated Budget Authority	0	2	3	5	7
Estimated Outlays	0	2	3	5	7
Total Direct Spending					
Estimated Budget Authority	132	138	142	133	19
Estimated Outlays	261	515	654	837	972

NOTE: Authorization Extensions, and Use of Proceeds are function 050 costs. Unemployment Benefits and Military Retirement are function 600 costs. Veterans' Benefits are function 700 costs.

40,000 such individuals would be eligible to apply for such benefits in 1991, at an estimated cost of $45 million. Thus, the total increase in direct spending due to unemployment costs resulting from this bill would be $135 million in 1991.

Benefits vary from state to state, and in some states payments are delayed or offset by severance payments, while in others compensation is unaffected by severance pay. Thus, depending on the states in which recipients collect their benefits, costs could be somewhat less than described above, although CBO is unable to estimate the magnitude of the difference.

REGULATORY IMPACT

Paragraph 11(b) of rule XXVI of the Standing Rules of the Senate requires that a report on the regulatory impact of a bill be included in the report on the bill. The committee finds that there is no regulatory impact in the case of the National Defense Authorization Act for Fiscal Year 1991.

CHANGES IN EXISTING LAW

Pursuant to the provisions of paragraph 12 of rule XXVI of the Standing Rules of the Senate, the changes in existing law made by certain protions of the bill have not been shown in this section of the report because, in the opinion of the committee, it is necessary to dispense with showing such changes in order to expedite the business of the Senate and reduce the expenditure of funds.

ADDITIONAL VIEWS OF MR. EXON

The Senate Armed Service Committee has reported out a National Defense Authorization Bill which represents nothing short of a revolutionary break with past legislation. Since the committee's actions on last year's authorization bill, a wave of democratic self-determination has swept Eastern Europe dissolving the Warsaw Pact as a military alliance. These and other profound changes in world events have forced the committee to reassess what type of armed forces is necessary to maintain our national security. This welcomed reduction in military threat has come at a time when the Administration and Congress face a budgetary crisis of mounting debt and growing demand for services, yielding a reality that all parts of the federal government, defense in particular, must do with less funding.

The task of redefining the size and structure of our military was made more difficult by an Administration FY 1991 defense budget with little vision. Though the requested budget marked the sixth consecutive year of real decline in spending, the funding levels were out of step with reality. The defense budget submission was rife with inflated funding requests (e.g. SDI, AMRAAM), obsolete systems (e.g. Follow-On To Lance, chemical weapons) and unaffordable programs (e.g. Milstar Satellite, ADATS air defense system). Compounding, the inadequacy of the Administration's budget request was the absence of the Defense Department's 5 Year Plan and the often delayed Total Force Policy Study.

The Committee has taken a series of major initiatives in the markup of the National Defense Authorization Bill which correct the inadequacies of the Administration's request and brings defense spending and policy in line with political and budgetary realities. In the Subcommittee on Strategic Forces and Nuclear Deterrence, which I chair, a Strategic Environmental Research Programs was established to apply the resources and talents of the Defense and Energy Departments and the intelligence community to environmental problems. In the area of environmental restoration and waste removal, a total of $383 million and $250 million were added to the requests for cleanup activities at Department of Energy and Department of Defense facilities, respectively. Perhaps no greater threat exists to our national security than the cost and potential health problems associated with the cleanup of the dangerous materials which have accumulated at hundreds of these sites over the past forty years.

One of the most sweeping and important of the Committee initiatives is in the area of manpower and personnel. Contained in the Committee bill is a drawdown in active duty military personnel of 100,000 and civilian personnel of 47,100 over the next year. This first year reduction places the armed services on a glide path to achieve a five year cut in personnel of 25%, a goal which I endorse in light of the demilitarization of Eastern Europe and the on-going Conventional Forces in Europe (CFE) treaty negotiations. Linked to this drawdown in troop strengths is an innovative package of compensation benefits for men and women who may be involuntarily separated.

The philosophy of "fly before buy" has been strongly embraced by the Committee in the evaluation of conventional and strategic weapons systems as a way to slow down high risk programs and avoid expensive fixes and repairs to systems which are unnecessarily rushed into production. By denying, reducing or deferring procurement funds for programs such as the B-2 bomber, the Light Helicopter, the A-12 attack plane, the Advanced Tactical Fighter, the Rail Garrison MX missile, the SSN-21 attack submarine, and the C-17 cargo plane, the Committee has taken a strong stand against "business as usual." We can no longer afford to hurry expensive and sophisticated weapons into production which no longer have a valid mission or which have not been properly tested.

In total, this bill is a revolutionary step toward coming to grips with a new age. Through the themes of maintaining nuclear deterrence at lower force levels, emphasizing greater use of reserve and guard forces and applying flexible readiness, the Committee has provided for a strong national defense and still realized significant budget cuts. But other presently untapped sources of savings should be considered further. For instance, the early retirement of one aircraft carrier alone would provide an annual direct cost savings of $156 million without imparing our nation's ability to project forces worldwide. To be sure, this and other tough decisions will need to be made in a future of austere military spending.

Overall, I urge my colleagues to support this excellent bill without major change.

J. J. EXON.

ADDITIONAL VIEWS OF MR. LEVIN

The Senate Armed Services Committee has reported out a Fiscal Year 1991 Defense Authorization bill that makes a number welcome revisions to the President's original budget request. However, I believe that an overall level of spending for the Department of Defense should be lower.

The threat from the Soviet Union has been significantly diminished and the once powerful Warsaw Pact is quickly becoming a historical relic. The two Germanies are on the verge of reuniting yet we continue to keep over 300,000 troops in Europe and to devote roughly half of our DoD expenditures to the defense of Europe. At the same time we face a massive and growing deficit, as well as serious shortfalls in the funding needed to address important domestic concerns like education and the clean up of our environment.

We are at a point where we can and must re-prioritize the federal budget. We have been successful in defeating a major external threat, we must now devote more attention to conquering the problems that we face at home.

The committee has recognized the need to respond to the changing threat and cut $18 billion out of the President's request. At the same time it has taken significant steps toward refocusing the requirements of the Pentagon. This bill includes a major National Guard and Reserve initiative that allows us to utilize this great defense resource more effectively. It also puts the Pentagon on notice that this committee will not provide funding for the production of weapons until we know that they will work. This fly before you buy approach can save us significant expenditures in the coming years. In addition, the committee has taken the first step towards reducing our military presence in Europe. This bill includes a provision that requires the withdrawal of 50,000 U.S. troops in Europe beginning at the end of FY91.

I am especially pleased that the Committee has made some significant reductions in the requests for strategic weapons, especially the MX Rail-Garrison missile system and the Strategic Defense Initiative. The Administrative requested over $2 billion for the mobile MX ICBM even though the program was highly concurrent and the General Accounting Office pointed to a number of significant technical risks associated with the overlap between the testing and procurement phases. The committee cut back the MX request by over $1.5 billion. This action was consistent with the approach that Sen. James Jeffords and I advocated in a bill we introduced earlier this year.

The Committee also reduced the level of funding for the Strategic Defense Initiative, however, I believe that additional funds should be eliminated. The Committee reduced the SDI funding to the level that was authorized in FY90, but significant questions remain about the program's purpose and the compliance of some of its components with the 1972 ABM Treaty. Numerous witnesses have testified before our committee that the purpose of the SDI program at this point is to provide the President with information sufficient for him to make a decision in 1993 on deployment of a Phase 1 SDI system. I do not advocate such an approach.

By concentrating on components on components that could be available for deployment in the near term, we overemphasize funding for unproven technologies such as Brilliant Pebbles. The Brilliant Pebbles system is the subject of considerable controversy. SDIO has not yet even determined whether tests on the system in the next few years would be complaint with the narrow interpretation of the ABM Treaty.

Further reducing the SDI budget is one step that could be taken to reduce the overall spending level for the Department of Defense. Other reductions will also be necessary to reach the lower spending levels advocated by the Senate Budget Committee. The Budget Committee has reported out a lower Budget Authority and Outlay number than is included in this Authorization bill.

The committee has considered the Budget Committee recommendations and in the report accompanying this bill the committee has layed out two methods of reaching the Senate Budget Committee spending levels. I cannot agree with either approach. One would reduce the personnel accounts so severely that about 285,000 uniformed personnel would have to be eliminated from the force in FY91. The other suggestion is to cut the procurement and R&D accounts so deeply that it would cause the decimation of our industrial base.

A more balanced approach to further reducing the defense budget can and should be applied. Significant reductions can be made in the funds provided for the purchase of stock fund inventory items that are unnecessary and wasteful. Other adjustments can be made in the operations and maintenance accounts. For example, we can freeze the operating tempo budget at the FY 90 level, and reduce the amount we spend on real property maintenance.

This year the committee has faced the very difficult job of restructuring the defense budget to meet the changes in the military threat to the U.S. It has done a fine job in most areas. However, I believe that further reductions, below the levels reported in this bill, will be necessary this year. When the time comes to make these additional reductions, I will advocate that the cuts be allocated across many accounts and programs. This will help maintain our quality personnel while further reducing those programs that are wasteful, redundant, and unnecessary.

CARL LEVIN.

ADDITIONAL VIEWS OF MESSRS. BINGAMAN AND SHELBY

The Senate Armed Services Committee has reported out a bill that reflects the changing nature of the threat to U.S. security. It is a forward looking authorization, with an underlying strategy for applying the limited resources available to achieve our national security objectives. We applaud the Chairman, Senator Nunn, and the Ranking Minority Member, Senator Warner, for fashioning a comprehensive package that will now serve as the basis by which future budgets will be developed.

However, in attempting to realign our defense priorities, the Committee remained largely silent on the direction of the Strategic Defense Initiative. SDI has grown from a concept outlined by President Reagan in March, 1983 to a robust program of research and development that could offer the prospect of highly-effective defenses. This is a program that we have strongly supported from its inception.

Throughout this period, Congress has given the Director of the Strategic Defense Initiative Organization (SDIO) a virtual blank check to develop the program within the framework of the 1972 Anti-Ballistic Missile (ABM) Treaty, strictly interpreted. Some two years ago, the orientation of the SDI program began to shift from broad-based research on the feasibility of highly-effective defenses to focused development of a system of limited effectiveness that could begin to be deployed during this decade. We fundamentally disagree with the need for a rush to a deployment decision by 1993. Furthermore, we do not want the entire SDI program oriented to such a goal.

In the belief that the actions of SDIO necessitate a restructuring of the program, we offered an amendment during mark-up that would, for the first time, give SDIO a budget. Our amendment allocates SDI funding among 11 line items. The Bingaman-Shelby amendment would hold funding for space-based Phase I systems, in particular Brilliant Pebbles, at approximately FY 1990 levels. At the same time, this amendment would put emphasis on ground-based, treaty compliant systems, theater defenses and longer-term options. (See chart located at end of our views.)

At the request of Chairman Nunn and Senator Warner, we did not push this amendment to a vote, although we believe we would have been successful. Instead, we will offer this amendment when this bill is taken up by the full Senate.

Passage of the Bingaman-Shelby amendment will give the Department of Defense clear guidance on the direction of the SDI program. We would be rejecting early deployment of systems that would violate the ABM treaty in favor of a program that would stress research and development for a treaty compliant, limited protection concept, theater misssile defenses and follow-on technologies.

JEFF BINGAMAN.
RICHARD C. SHELBY.

FY 90-91 SDI LINE ITEMS
(millions of dollars)

	FY 90	FY 91 (REQUEST)	FY 91 (BINGAMAN-SHELBY)
Phase I (excluding BSTS)	1388.0	1948.2	1510.3
Sensors (SSTS/GSTS/GBR)	207.0	345.0	345.0
Ground-based Interceptor	127.7	142.0	142.0
Brilliant Pebbles	129.0	329.0	129.0
Other Phase I	924.3	1132.2	894.3
Follow-On	840.2	984.4	944.4
Key Technologies	284.7	337.1	320.0
Operational Support/Mgmt.	227.9	228.3	227.8
Test and Evaluation	189.5	217.3	180.0
Theater Defense	124.7	131.8	180.0
IS&T/SBIR	113.4	116.8	116.8
Engineering Analysis	102.9	93.7	93.7
TOTAL	3271.2	4058.0	3573.0

Glossary of Abbreviations

BSTS = Boost Surveillance and Tracking System
SSTS = Space Surveillance and Tracking System
GSTS = Ground Surveillance and Tracking System
GBR = Ground-Based Radar
IS&T = Innovative Science and Technology
SBIR = Small Business Innovative Research

ADDITIONAL VIEWS OF MESSRS. WARNER, THURMOND, WILSON, McCAIN, WALLOP, GORTON, LOTT, AND COATS ON THE EMERGING THREAT ENVIRONMENT, FUTURE U.S. NATIONAL SECURITY REQUIREMENTS, AND THE STRATEGIC DEFENSE INITIATIVE

Each of us voted to report this bill favorably to the Senate because it provides for the minimal capabilities needed to protect U.S. national security interests, at least for the near term. There must always be a direct correlation between the threats facing our nation and our allies and friends, with whom we have binding mutual defense commitments, and forces; those threats remain uncertain.

We, Minority members of the Senate Armed Services Committee, must register our concern about some of the assumptions used by the Majority in formulating this bill. Our primary concern is with their view of the nature and extent of the change in the threats worldwide, not just central Europe. Because of our basic disagreements on the change in the threat, we also are concerned about the priorities established in the bill, the outyear funding levels, and the substantial adverse effects of these funding levels on the ability of our defense industrial base to respond to defense needs in the near future.

We hail the march of democracy in Eastern Europe and do not disagree that defense spending will and should reflect the lowering level of threat in that area of the world. Many of the reductions proposed in this bill are justified by the dramatic disintegration of the Warsaw Pact. However, until the Soviet political situation becomes more predictable and stable, U.S. defense spending must be maintained at a level sufficient to deter and counter actual Soviet military capabilities, not Soviet expressions of intent. As a global power, we must be prepared to deter and counter, if necessary, existing and emerging threats from sources other than the Soviet Union. Therefore, we cannot at this time endorse the outyear defense funding levels asserted by many in the other party in reaching decisions of this bill. For the same reasons, we cannot endorse the funding levels proposed by either of the Congressional budget committees.

Furthermore, we are concerned about efforts to require even larger reductions in defense spending. The so-called "peace dividend" simply cannot be realized in a single year without doing irreparable damage to our overall defense posture. We must ensure that the restructuring of our defense posture does not result in a return to the "hollow army" of the late 1970s. On this point, Republicans and Democrats on the committee are probably in general agreement.

We are also concerned about the pace and manner of the defense restructuring initiated by this bill. In this regard, we note the statement in the committee report that:

> The committee believes that the level of funding authorized in the bill is appropriate based on the changes in the threat, a revised military strategy, and a responsible and manageable glide path to a smaller defense establishment over the next five years.

This endorsement of five-year levels may well lead, in the long term, to clear disagreement between us and the Majority members of the committee about the level of continued reductions and the priorities in the defense program. Even if Republican and Democrat members of the committee could agree on funding levels and priorities over the next five years, it is by no means certain that such a program could be sustained in the Congress. This poses serious concerns to the Republicans on the committee.

We have ser forth below our more detailed views on the continuing threats to our national security and on the need to give priority to certain aspects of our defense program, especially our nuclear deterrent.

STRATEGIC NUCLEAR DETERRENCE AND THE CHANGING THREAT

We believe that a fundamental underpinning for U.S. national security is a credible and modern strategic and theater nuclear deterrent. Nuclear weapons have successfully maintained the peace among the major powers since World War II. We see no reason to discard or undermine our reliance on this deterrence strategy. Such a strategy must be based on a balance between arms control negotiations and credible, albeit reduced, nuclear modernization program. In this regard, we note that arms control and stability measures are one means for determining the U.S. national security requirements, but not an end in themselves. Given the continued robust Soviet strategic modernization program, we believe that the requirements for a credible deterrent cannot be maintained, as suggested by the Majority in the body of the report, at "forces lower in level and more stable in structure than those currently proposed at the START negotiations". We do, of course, believe that our strategic forces should be "more stable in structure", but at this point not at levels below START. Further reductions should be negotiated in follow-on strategic arms reduction talks, not unilaterally.

We also disagree that Secretary of Defense Richard Cheney has "tended to overstate [the Administration's] case . . . that there has been no change in Soviet strategic nuclear forces. . . ." Secretary Cheney has acknowledged on a number of occasions that the Soviets are conducting their strategic modernization program along the expected baseline of the proposed START Treaty. Nonetheless, when continued Soviet strategic modernizaton is compared to the fiscally and politically constrained U.S. strategic modernization efforts, and with identical force levels afforded to each side under START, little, if anything, will change in terms of the objective Soviet strategic nuclear threat. Indeed, Soviet strategic offensive and defensive modernization is "broad-based", according to William Webster, Director of Central Intelligence, and thus could become even more threatening under START. In other words, *all* Soviet nuclear systems are growing more capable due to technological improvements. These systems include two new mobile ICBMs, the much more capable SS-18 heavy ICBM, two submarine programs and improvement SLBMs, and two bomber programs. We also view the changes in Soviet operational behavior, as outlined in the report, as insignificant since these activities can be, and in some cases have been, reversed.

Moreover, according to Dennis Nagy, acting Deputy Director of the Defense Intelligence Agency, in recent testimony before Congress, "The Soviets . . . continue to invest about as heavily in active and passive strategic defenses as they do in offensive forces, and their capabilities are improving in all areas." This defensive modernization will increasingly bring into doubt the credibility of our nuclear deterrent to threaten what the Soviets value most, unless U.S. nuclear modernization programs receive at least a sustained, if not an increased, funding commitment. Our concern is further compounded because the strategic programs in this bill cannot be deployed with the assumed five-year spending levels underlying the bill. In short, we fear there will be insufficient funds for both ICBM modernization and the B-2 program, if the conventional programs included in the bill are to be continued.

We also believe that the U.S. must consider the benefits of ballistic missile defenses in enhancing stragetic deterrence and stability. These additional benefits are discussed at length in the section on the Strategic Defense Initiative below.

Nuclear Weapons Complex Problem

The ability to maintain a credible deterrent is further undermined by the lack of funding and support for modernizing the nuclear weapons complex. Indeed, not one word about this looming problem is mentioned in the body of the report. If the United States is to remain a nuclear power, it is absolutely essential that the forty-year-old nuclear weapons complex be modernized. Today, the United States is not able to manufacture the components necessary to build nuclear weapons. We are thus faced with the propect of deploying the TRIDENT submarine without more capable W-88 warheads for the D-5 missiles, or keeping the SRAM warhead in service when there is a serious potential of plutonium dispersal in a fire, and of a total inability to maintain the stockpile. The committee will eventually have to confront the inconsistency of supporting a nuclear program without the ability to produce warheads needed for a safe, credible deterrent capability.

We, of course, support strongly the need to clean up the environmental devastation of 40 years of operaton of this decaying complex, and we voted to increase funding for cleanup to accomplish this task. Nevertheless, we must also address the other problem: out inability to maintain a safe and modern nuclear weapons production complex, which is so vital to maintaining our nuclear deterrent. In contrast, the Soviet Union has not reduced the output of their already vast nuclear weapons complex, and they are continuing with its modernization.

CHANGES IN THE WARSAW PACT THREAT

We feel there are inconsistencies and a lack of long-range thinking in the body of the report regarding how the dramatic events in Europe have changed the threat and, consequently, how those events have changed the requirements for strategic force modernization, future European stability, and other global commitments. In the introduction to the report, it is stated:

> . . . that the threat of a large scale Warsaw Pack attack against Western Europe has virtually been eliminated and the changes of any Soviet 'go it alone' attack across Eastern Europe against the West are very remote. Any Soviet effort to re-establish a credible threat of a large-scale conventional attack on *NATO* would be very difficult and would require a vast and extended mobilization, thereby giving *NATO* many months of warning time. (Emphasis added)

While the Warsaw Pact may be defunct as a fighting force, the Soviets still maintain the largest, most modern land army in the world. The Soviets spend 25 percent of their gross national product on defense—as recently admitted by Soviet Foreign Minister Shevardnardze at the 28th Community Party Congress earlier this month. While their tank production may be declining, the Soviets will still produce 1,400 tanks in 1990, a almost 3 times as many as we will build. They will also build 4,800 armored personnel carriers and 500 self-propelled artillery pieces, almost 10 times the neumbers we will build. We note with considerable interest a report in the July 10, 1990 *Washington Post* that:

> The 28th Community Party Congress . . . adopted a toughly worded resolution on military policy today, declaring that the Soviet Union is still under threat from the West and needs to strengthen its armed forces.

Nevertheless, we are in general agreement with the majority's assessment of the political situation that exists today. But this assessment of how conflict and instabilities may arise in Europe is rooted in a Cold War, East-West political concept that may well not exist in the next few years. We must begin to consider how Europe will look as NATO's roles and missions evolve and historic ethnic and national differences begin to surface as potential causes of instability and war. What role will be played by the U.S. and its military in such disputes that may arise in Europe? In short, the bipolar conditions of the Cold War were far more predictable and stable than the multipolar world that is emerging in Europe. We must begin to plan for these new possibilities.

Moreover, as Poland and other former Warsaw Pact countries become part of the European family of democracies, politically and economically, we must consider how the remaining, but still formidable, Soviet military threat will be viewed by them and what security guarantees would be extended by the U.S. and other Western European countries. Accordingly, in terms of justifying significant reductions in the U.S. military presence in Europe based on lengthened warning times, we believe that the committee report is focused too narrowly on the diminishing threat to NATO as it exists today, not on the security situation as it may emerge in the future. Until the future direction of the Soviet Union and Europe as a whole is more clear, we must be cautious in both the pace and size of U.S. reductions in Europe as wlll as in changes in our security commitments.

These potential sources of instability and conflict will have a significant effect on how the use of nuclear weapons could be initiated between the U.S. and the Soviet Union. While the likelihood of strategic nuclear conflict arising out of a conflict in Europe has probably diminished due to the changes in the Warsaw Pact, other factors and scenarios are emerging that could result in the use of such systems. For this reason, we believe the U.S. and other European countries must support and maintain a vigorous theater nuclear modernization program, in addition to a credible U.S. strategic nuclear modernization program. We also support the London Declaration of July 6, 1990, by NATO leaders, which reaffirms our reliance, although with lesser emphasis, on "flexible response," and the understanding that nuclear systems:

> . . . will continue to fulfill an essential role in the overall strategy of the Alliance to prevent war by ensuring that there are no circumstances in which nuclear retaliation in response to military action might be discounted.

So long as the United States remains committed to ensuring a free and democratic Europe, be it as part of NATO, CSCE, or some other form of mutual security arrangement, we must ensure that we never need return to the 1950s doctrine of massive retaliation. It is in the best interests of the United States and the best interests of our European allies that we possess a full range of nuclear capability to control escalation of any conflict.

REGIONAL THREATS

While agreeing with the general assessment that the military threat in Europe from the Warsaw Pact has "diminished significantly" based on the threat that has existed since World War II, we strongly disagree with the assertion in the report that "the tensions and open warfare that threatened Western interests in some, but not all, other regions have also abated." An examination of regional threats to Western interests shows that the world has not become a safer place for the West in areas outside of Europe. Unfortunately, the dramatic changes we have witnessed in Europe have yet to spread to other regions of the world. Therefore, we do not agree with the assessment that developments around the world—not just in Europe—justify fundamental changes to U.S. national security policy and military strategy.

Middle East/Persian Gulf

The Middle East is a prime example of a region of the world that has not experienced a lessening of tension in the past year. We agree with the concerns expressed in the body of the report regarding continuing—if not escalating—threats to Western interests in the Middle East. Arab-Israeli tensions have reached an alarming level. This is compounded by the fact that the proliferation of ballistic missiles, chemical weapons, possibly nuclear weapons, and advanced weaponry of all types has made an already tense region increasingly unstable. Accordingly, we support strongly the development of anti-tactical ballistic missile systems to protect not only U.S. forces in the region but also those of our friends and allies against these threats.

Given the U.S. commitment to the State of Israel and the Western need to guarantee access to the oil resources of the region, a conflict in that part of the world would inevitably involve U.S.—and most likely allied—forces.

In light of the overall threat environment in the Middle East, we are puzzled by the manner in which the Majority have stated their conclusion that the U.S should focus on scenarios requiring fewer forces and materiel than does a Soviet invasion scenario. The report points out that U.S. forces plan for two contingencies in the Persian Gulf: (1) an attempt by a Persian Gulf nation to block the sea-lanes used for carrying oil out of the Gulf; and (2) a Soviet move to seize the oil fields in the region.

We fear that the committee report implies that we should not even plan for the second of these scenarios and that present U.S. force structure in that region is more than needed for the first scenario. We reject both of those implications.

As stated in the report, securing Western access to the oil resources of the Persian Gulf has been a U.S. priority since 1980. Given the fact that two-thirds of the world's oil reserves are located in the Persian Gulf, this area will remain vital to Western security for decades to come. Therefore, U.S. military forces must be prepared to deal with all contingencies which threaten Western access to the region.

U.S. military forces were last used in active support of this mission of securing access to Persian Gulf oil resources during the successful reflagging operation which was conducted by the Reagan Administration. That operation required, over an extended period of time, a substantial commitment of U.S. military personnel and resources, many of which were otherwise committed to missions outside the region. Although the reflagging operation guaranteed the virtual uninterrupted flow of oil from the Gulf and resulted in the cessation of open hostilities in the region, the Iran-Iraq War is far from over. As peace talks remain stalled, both Iran and Iraq are actively re-arming in anticipation of a renewal of hostilities. Tensions in the region remain high, making very real the possibility that U.S. forces may be called on in the near future to once again protect the sea-lanes in the Gulf. Now is not the time to further decrease our ability to respond to such a call.

Concerning the second contingency of a Soviet attempt to seize the oil fields in the region, we agree that the likelihood of such an action has decreased. However, given the problems the Soviets are currently having with their indigenous oil reserves, we believe that the possibility of a Soviet move into the region cannot be totally dismissed by military planners.

Pacific Region

The Pacific is yet another area of the world where the threats to Western interests have not decreased in the past year. The main threat to regional security remains North Korea. We do not agree, however, that South Korea is capable at the present time of meeting this threat without a continued U.S. force presence at levels high enough to deter a North Korean attack. While it is true that South Korea is in the process of developing a large, modern military force, North Korea still enjoys military superiority—both qualitatively and quantitatively—that the Department of Defense estimates will last for the next decade. In addition, North Korea's leadership has a record of unpredictable, violent behavior. There is no indication that this pattern will change in the near future.

We agree that South Korea should assume greater responsibility for its own defense. However, the United States should not withdraw precipitously from South Korea, thereby inviting the aggression from the North that a U.S. troop presence has helped to deter for almost 40 years.

The report outlines other threats in the Pacific—from China to the Philippines—which we believe clearly evidence that tension in this region has not decreased as it has in Europe.

Latin America

We agree that Latin America remains an unstable region, despite the advances we witnessed with the success of "Operation Just Cause" and the election of a democratic government in Nicaragua. In both Panama and Nicaragua, fledgling democracies are struggling to take hold. Yet tensions and potential conflict remain the hallmarks of the region.

Our analysis of the areas of tension and conflict around the world reveals that the generally peaceful developments in Europe are an exception in an otherwise continuing violent world. While U.S. military planners may be able to adjust their strategy for a possible European conflict, there has been no diminution of the threat in other regions which would justify reductions in U.S. military commitments outside of Europe.

NAVAL FORCES

We believe the committee has not yet developed a record justifying the statement that "the Navy can meet future requirements with between 10 to 12 carrier battle groups." The committee has asked the Defense Department to provide a report which addresses this question. That report is to address deployment patterns, requirements for aircraft carriers in the Mediterranean Sea and the Indian Ocean, the personnel impact of reduced carrier force levels, and criteria for evaluating proposed reductions in overall naval force levels. Thus until this information has been properly considered, we believe it is not possible to reach conclusions regarding reductions in aircraft carrier force levels. Furthermore, we believe any decision on naval force levels must be made in the context of the committee's stated intention to emphasize mobile, flexible forces.

Moreover, we would draw attention to statements made this year by the Director of Naval Intelligence regarding the modernization of Soviet naval forces. The DNI has said that the Soviets are continuing a vigorous naval modernization and ship construction program:

—The Soviets continue to build an average of nine submarines annually (five nuclear powered submarines and four non-nuclear ones). They currently are in series production on six classes of submarines. In terms of tonnage accepted by the Soviet Navy, perhaps a more accurate measure of level of effort, 1989 was the most productive year for Soviet submarine production since 1980.

—Surface combatant construction also continued at a brisk rate in 1989—nine major units were launched, and an additional 11 Soviet-built units, launched in previous years, were accepted by the Navy and one by the Maritme Border Guards. Construction continued on nine classes last year, including two carrier classes, two cruiser classes, two guided missile destroyer classes, two frigate classes, and a corvette class.

—The first large-deck Soviet aircraft carrier began sea trials during the past year, and two more are under construction. In November of 1989, three types of Soviet aircraft (MiG–27/Flanker; SU–25UT/Frogfoot; and MiG–29/Fulcrum) each conducted carrier landings and take-offs from the carrier TBILISI.

—With regard to conversion of defense industries to civilian use, the DNI said, "It is possible conversion is affecting the Soviet Navy and we have not detected. But to date the evidence is just not there. Quite the contrary, [Soviet] Navy modernization seems to be steaming ahead with little slackening of pace."

In short, in restructuring our naval forces in general, and carrier forces in particular, we must be mindful of our worldwide commitments, the actions of the Soviets, and have a complete understanding of the effects on the mobility of the force. Given our analysis of the regional threats in the world, at this time, we do not believe there is sufficient evidence of a decreased need for naval and carrier forces to make any irreversible decision concerning that force structure.

THE STRATEGIC DEFENSE INITIATIVE

We strongly dissent from the report's criticism of the emphasis on research and development for Phase I of a Strategic Defense System. We feel that a 1993 date for an informed decision regarding deployment of Phase I is neither arbitrary nor hasty. But it is certain that without adequate funding and concetration on the near-term technical possibilities encompassed in Phase I, the President will not have the opportunity to make that decision, even if he believes as Commander-in-Chief that proceeding with strategic defense is vital to the nation's security.

The Committee report cites selected passages of the Defense Science Board Report on Brilliant Pebbles in support of its criticism of SDI. Brilliant Pebbles is a technological breakthrough which holds great promise as the basis of an affordable, effective Phase I strategic defense, and it is simply incorrect to characterize the Defense Science Board as unfavorably dispose to the SDI program. The *full text* of the primary passage cited in the Committee report reads as follows:

> The SDI program appears to suffer from a conflict of purpose. At times the program has empahsized research on new and better technologies and concents. At times it has emphasized deployment of a system. These two aims are in competition, especially in view of the nature of the existing acquisition process.
>
> There is no reason why the processes of exploring and getting ready to build cannot go on in parallel. There could be at any time a design that could be implemented, i.e., developed and employed if necessary or desired, and an exploration of alternatives, with a mechanism for getting new and prove ideas into the current design. This is a reasonable approach if clearly delineated, the balance of activities defined, and the transfer mechanism described. Once a firm decision to develop and deploy is made, the balance would necessarily change, but no such decision is imminent. There is not new a clear direction to SDIO about which of these objectives they are supposed to pursue and if both, as it seems likely, the relative emphaisis on the two.

One of the "independent groups" cited by the Defense Science Board is the JASON group, whose members are by no means uncritical supporters of SDI. The JASON report on Brilliant Pebbles says in part:

> A program of research on lighweight proliferated, autonomous, kinetic-kill interceptors using near-term and maturing technology deserves continuing support. It will be essential to avoid either excessive conservatism or excessive optimism in choosing which technologies to support; near-term but not off-the-shelf technologies may be mission critical. Although there does not appear to be any obvious technological show-stopper, there are several problems which must be addressed: performance of readily-available technology, lack of hardness of commercial technology against a nuclear enviroment, and possible countermeasure threats.

We also believe that certain aspects of the SDI program cannot be accurately characterized as a high-risk, "cash" program as the Committee report suggests. The investment of six years and $20 billion has produced indisputable technical progress and a high degree of confidence in our ability to develop feasible strategic defenses, as the DSB and JASON reports demonstrate. As the Scretary of Defense stated in his June 7, 1990 letter to the Committee, the proposed program will build on SDI's notable progress and support an informed decision within the next three years.

Furthermore, we observe that it is merely the technical possibility or feasibility of strategic defense that make a deployment decision in the near-term imperative. The Committee has noted with serious concern elsewhere in the report the Soviet Union's continued, vigorous, and broad-based modernization of both offensive and defensive strategic systems, including the deployment of two new mobile ICBM's and a continued investment in ballistic missile defense. While the threat of Soviet conventional forces has clearly diminished, the Soviet strategic capability continues to pose a significant threat to U.S. national security, particularly in light of the unpredictable events taking place in the Soviet Union.

SDI AND START

We find that the deployment of limited defenses, including but not limited to the Phase I SDI, is consistent with START and future U.S.-Soviet arms control negotiations. As the United States and the Soviet Union reduce emphasis on strategic offensive forces, limited defense can contribute significantly to stability and deterrence. Deep cuts in strategic offensive forces may actually reduce stability if residual forces become more actually reduce stability if residual forces become more vulnerable in the process, especially if a reduction in aim points is accompanied by an abandonment of mobility for the ICBM force. Phase I SDI will reduce this vulnerability, thereby strengthening supported by studies conducted at the Army's Strategic Defense Command.

We reject the view that SDI must approach 100 percent effectiveness against a massive Soviet attack in order to contribute to deterrence and stability. This perspective is rooted in the flawed notion that deterrence is solely a function of threatened offiensive retaliation. In fact, by merely increasing the uncertainty of a prospective attacker, strategic defenses, including Phase I, can significantly bolster deterrence. It is unfair and misleading to judge SDI by a standard that has never been used to assess strategic nuclear forces—a near-perfect warfighting capability. It is ironic that many of those who are least critical and demanding in evaluating the deterrent contribution of strategic offensive forces simultaneously set a high and unreasonable standard for ballistic missile defenses.

The Committee report suggests that a START agreement, by eliminating 20 percent of Soviet nuclear warheads, would provide a level of security equivalent to that provided by a Phase I deployment. But to compare warheads eliminated from a stockpile or arsenal with warheads destroyed in an attack is fallacious. Even modestly effective missile defense can severely complicate the problem of the attacker, and reduce his confidence in the success of the attack. The uncertainty of success generated by missile defenses can add greatly to deterring a deliberate ICBM launch, and even prevent "nuclear blackmail" or coercion.

Moreover, a Phase I Strategic Defense System can provide additional advantages not available under a START agreement, including but not limited to: protection against accidental or unauthorized ballistic missile launches; ballistic missile attacks by third countries; enhanced survivability of U.S. deterrent forces through preferential defense; partial population protection and damage limitation; and a hedge against Soviet violation or circumvention of a START agreement.

The necessity for defending against non-Soviet ballistic missile attacks cannot be overstated. The unanimous adoption by the Senate of S. 195, *The Chemical and Biological Weapons Control Act,* clearly indicates the Senate's concern over the proliferation of chemical and biological weapons as well as ballistic missile delivery systems. In Section 2 of S. 195, the Senate "found that at least 15 developing countries will have the ability to produce ballistic missiles capable of carrying chemical or biological warheads by the year 2000." Also in Section 2, the Senate "found that as many as 20 countries have or are seeking the capability to produce chemical weapons."

This emerging threat to U.S. national security, our forces, and those of our allies and friends must be addressed. There can be little doubt that the technologies now being developed as part of the SDI program should be exploited to the fullest extent possible, and systems designed to counter this threat should be made available to our forces and those of our allies as soon as possible.

SDI AND THE ABM TREATY

We also recognize that the development and testing of the space-based interceptor component of Phase I may ultimately require the U.S. to go beyond the terms of the 1972 ABM Treaty. It is our belief, however, that should effective defenses against ballistic missiles prove feasible, it would be worthwhile to reconsider U.S. participation in the ABM Treaty.

To be sure, the assumptions upon which the ABM Treaty were based are no longer valid today. First, there was to be a linkage between offensive and defensive forces, such that limitations on ABM systems would lead to deep offensive force reductions. To the contrary, deep reductions in strategic offensive weapons did not occur in the wake of the ABM Treaty.

Second, it was assumed that threats to the survivability of respective retaliatory forces would be reduced. This was of particular concern to the United States because the Soviet Union was then deploying very large numbers of "heavy" ICBMs. Only two years after signing the ABM Treaty, however, the Soviets were found to have in an advanced stage of testing two new heavy missiles, SS–18 and SS–19. The Soviets have continued to deploy the highly lethal and modern SS–18 missile. As a result, the Soviet ballistic missile force continues to increase the vulnerability of the American retaliatory forces.

Third, it was assumed that the technologies then available for missile defense were neither survivable nor cost-effective and thus insufficient to deny the attacker his objectives. The SDI program has demonstrated that technologies have been developed since the ABM Treaty that may permit the United States to deploy a reasonably effective non-nuclear missile defense system.

Ambassador Paul Nitze wrote that the ABM Treaty was intended to be adaptable to new circumstances, not to lock the United States and Soviet Union into a strategic relationship that might be less stable and less desirable than other possibilities that might emerge in the future. The recent warming in U.S.-Soviet relations may now present an opportunity for both sides to recast the strategic relationship from one based on offensive retaliation only, to a stabilizing balance of offensive and defensive forces. An important collateral benefit to both sides of such a shift would be protection against the emerging third country ballistic missile threat.

A Negotiated Transition

While we believe the protection of the U.S. population to be important, we are also confident that the Soviet Union and United States can reach agreement on terms for a negotiated and stable defensive transition that could lead to a mutual decision to amend the ABM Treaty.

To this end, the United States and the Soviet Union have been engaged in the Defense and Space Negotiations since March 1985. In the June 1, 1990 *Joint Statement on Future Negotiations on Nuclear and Space Arms,* the U.S. and the U.S.S.R. agreed to pursue new talks on the relationship between strategic offensive and defensive arms, with the objective of ensuring strategic stability. According to the statement: "This will be achieved by seeking agreements that improve survivability, remove incentives for a nuclear first strike, and *implement an appropriate relationship between strategic offenses and defenses."* (Emphasis added). The Joint Statement also emphasized the need to consider "development of new technology." We support this process and strongly discourage congressional attempts to block movement toward a more balanced deterrent relationship. U.S. interests and global security would be better served by encouraging the Soviet Union to move in the direction of a Defense and Space agreement that wouuld codify a stabilizing and balanced deterrent relationship between the United States and Soviet Union based on a mix of offensive and defensive forces.

CONCLUSION

We emphasize that we do not disagree with the general recommendation put forth in this bill to restructure our forces. Indeed, many of the proposals, such as lighter, more mobile forces, are programs which have been initiated or strongly supported in the past by Republican members of the committee. However, the threat assumptions, program priorities, and outyear funding levels discussed above are matters of concern to us. We will ensure that these issues are addressed in the legislative process, and we intend to work to restore the long-standing bipartisan support for the MILSTAR program, which is discussed in detail in a separate section of the report. We look forward to working with the Administration to help formulate strategy which addresses our concerns and ensures that restructuring does not irreparably harm our defense industrial base or the warfighting capability of our military forces.

Strom Thurmond.
John McCain.
Slade Gorton.
Pete Wilson.
Malcolm Wallop.
J. Warner.
Trent Lott.
Dan Coats.

ADDITIONAL VIEWS OF MESSRS. WARNER, THURMOND, COHEN, WILSON, McCAIN, WALLOP, GORTON, LOTT, AND COATS ON THE DECISION TO TERMINATE THE MILSTAR PROGRAM

The Republican members of the Senate Armed Services Committee disagreed strongly with the committee's decision to terminate the MILSTAR communications satellite, the President's highest priority communication program. We also view the committee's report language on MILSTAR to be based on inconsistencies and to lack objectivity.

A major argument put forth by the committee Majority for terminating MILSTAR is that the program is unafforadable, particularly since "... nuclear confrontation is less likely and tactical contingencies are more likely." This approach is seriously inconsistent with the committee's bipartisan approach to space control requirements over the past ten years. In last year's committee report, we expressed our concern:

> . . . about the vulnerability of critical U.S. satellites and the general lack of flexibility, redundancy, and responsiveness of our space access systems which make up such critical components of our space control capability. These deficiencies appear largely to be the result of decades of incremental decisions favoring "peacetime efficiency" over wartime needs. Ignoring the costs of providing survivability and redundancy effectively hides the true cost of performing a mission or function from space.

In the committee report, the Majority now poses a number of questions which it asserts have not been satisfactorily answered. While we are not aware that these questions have ever been asked of the Department of Defense, we, unlike the Majority, feel confident that the Department has provided sufficient information over the years to answer each of these questions to our satisfaction.

Furthermore, we find it somewhat confounding that the Majority should, for the first time, attempt to evaluate the affordability of a satellite system based upon the Majority's own estimates of so-called "twenty-year life cycle costs." We are unaware of this costing approach being applied to any other satellite program in the defense budget. The Majority's assertions concerning delays and cost increases are also somewhat misleading inasmuch as Congressional actions were a major contributor to both delays and cost increases.

MILSTAR is the one program that was designed to provide survivable and redundant communications for all our forces. Moreover, even if it were true, as asserted by the Majority, that MILSTAR is improperly biased toward nuclear operations, the satellite can easily be altered for conventional purposes by changing loading requirements to support these users. In other words, there is nothing inherent in the satellite which would preclude changes in user emphasis, while maintaining the ability to ensure survivable/jam-resistant capability to our forces.

MILSTAR is also the only U.S. satellite communication system capable of providing ensured connectivity to our strategic and tactical military forces. In this regard, ensured connectivity is the ability to provide 24-hour-a-day two-way communications to our strategic and theater nuclear forces as well as the Commanders-in-Chief (CINCs) of all our conventional forces worldwide. This requirement is just as important today as it was when the program began in 1981. In fact, in a letter to Deputy Secretary of Defense, Don Atwood, dated March 23, 1990, Vice Chairman of the JSC Admiral David Jeremiah, revalidated the requirements for MILSTAR stating: "The JROC validates the requirement for MILSTAR and recommends that it be continued as the *most important* Command, Control, and Communications program for the Department of Defense." (emphasis added)

Republican members are perplexed by the MILSTAR termination since the committee, while noting changes in the threat, agreed elsewhere in the report that:

> . . . the Soviet Union has continued with a vigorous and broad-based strategic offensive and defensive modernization effort that is improving its overall capabilities . . . [this] is a matter of continued serious concern and remains the paramount threat to U.S. national security. . . .

This assessment led the committee as a whole to support the President's strategic offensive modernization program, at least for fiscal year 1991. We believe it is thoroughly inconsistent to support the offensive modernization program and at the same time, deny the U.S. National Command Authority the ability to have ensured communications to those forces. For example, the benefits of having a modernized bomber or submarine force are significantly decreased in the absence of effective communications with the force and constant positive control over their nuclear payload. We, the Republican members, find such a situation intolerable since it undermines strategic and crisis stability. In short, if the United States believes that nuclear deterrence is still viable and continues to provide for its modernization, the MILSTAR continues to be the most vital communication program and stability measure.

The MILSTAR program was designed to ensure that the U.S. has the survivable means to recall forces immediately and terminate hostilities. Republicans also find an inconsistency in the committee's recommendation to explore the feasibility of including destruct mechanisms and permissive action links on our ballistic missile delivery systems, when the very satellite communications program that could be used at an affordable cost to transmit such instructions was terminated in the bill.

Republican members are also confused by the Majority's assertion during debate on this program that ". . . over time, the tactical conventional user base for the system has atrophied, leaving MILSTAR as a satellite for nuclear CINC conferencing and SIOP execution." During markup, the committee received a letter from the Chief of Naval Operations, Admiral Frank Kelso, expressing his concern over the possibility that the MILSTAR program may be terminated after four satellites. In the letter, he states:

> As you are aware, all the CINCs are strong supporters of both the MILSTAR satellite and terminal programs. I personally testified this year as CINCLANT that the MILSTAR communication system is critical for the National Command Authority and CINC control of our strategic and tactical forces. A reduced or limited MILSTAR constellation will not be able to provide the necessary worldwide and regional coverage required to execute maritime operations in time of conflict. I strongly support the full satellite constellation.

We have attached to these views the full text of this letter from Admiral Kelso, as well as the full text of the letter from Vice Chairman of the Joint Chiefs, Admiral Jeremiah, and a letter from CINCSPACE, General Kutyna, concerning the importance of the MILSTAR program.

The Navy has been one of the biggest supporters of the MILSTAR program. MILSTAR provides the Navy with over-the-horizon communications for dispersed forces worldwide, anti-jam capability, and secure, low probability of intercept and detection of communications with the submarine and surface forces. No other U.S. satellite system can offer these features without significant redesign and additional costs. To assert otherwise demonstrates a lack of understanding of satellite communications and technology. Such support and capability can hardly be characterized as showing a "nuclear bias."

Moreover, this committee is responsible for the Department of Defense reorganization which, among other things, ensured that CINCs were given a strong voice in the formulation of weapons requirements. It is ironic, then, that this committee terminated MILSTAR when it was endorsed strongly by the CINCs. Again, quoting Admiral Jeremiah's letter: "The CINCs have reconfirmed their requirements for MILSTAR, as stated in current requirements documents, and strongly support its deployment."

As U.S. overseas base rights continue to decrease, the importance of MILSTAR will increase. MILSTAR's on-board processing and crosslinks allow the U.S. to reduce its dependence on overseas bases for satellite tracking and relay requirements. MILSTAR satellite control can be conducted entirely from U.S. ground stations or mobile platforms. Again, no other U.S. satellite system has this capability. MILSTAR will also save approximately $500 million in annual operating costs by allowing us to deactivate Strategic Air Command alert communication and command aircraft and other systems. MILSTAR provides cost avoidance savings by reducing the requirement for mobile command centers and obviating additional direct communications to our forces, which must be procured if the program is indeed terminated. These savings could be between $7 and $10 billion.

Again, we believe that the MILSTAR program cannot be fairly characterized as solely a "strategic nuclear warfighting" system as it provides an important link to both our strategic and tactical forces. However, even if that were not the case, we cannot agree with the approach apparently being taken by the Majority that, because the possibility of strategic nuclear war has diminished, we should cease planning for a credible response to such a possibility. A credible response is the essence of deterrence.

Finally, the House Appropriations Committee similarly terminated the MILSTAR program in its FY 1990 appropriations bill. After careful deliberation, the Appropriations Conference report reinstated the program, arguing that:

> If the mission of MILSTAR were less critical to the surviving and enduring communications architecture necessary to support the national security functions of this country, there would have been little support for continuation of the program. However, if MILSTAR were terminated at this point, the expense to begin development of a new system might well exceed the cost in both time and dollars to salvage the MILSTAR program itself.

Republican members also believe that the MILSTAR program should be reinstated: This program over the years has suffered many perturbations in Congressional funding. This has contributed to cost overruns and delays in the program. We fully support the program and will work on a bipartisan basis to secure funding during the legislative process this year.

STROM THURMOND.
JOHN MCCLAIN.
SLADE GORTON.
PETE WILSON.
J. WARNER.
MALCOLM WALLOP.
DAN COATS.
TRENT LOTT.
BILL COHEN.

CHIEF OF NAVAL OPERATIONS

10 July, 1990

Dear Senator Warner:

I am very concerned about indications that the Committee on Armed Services is seriously considering terminating the MILSTAR program after four satellites. As you approach the FY91 markups, I am taking this opportunity to let you know how I view the MILSTAR system.

As you are aware, all the Commanders-in-Chief (CINCs) are strong supporters of both the MILSTAR satellite and terminal programs. I personally testified this year as CINCLANT that the MILSTAR communication system is critical for the National Command Authority (NCA) and CINC control of our strategic and tactical forces. A reduced or limited MILSTAR constellation will not be able to provide the necessary world-wide and regional coverage required to execute maritime operations in time of conflict. I strongly support the full satellite constellation.

I urge your continued support for the MILSTAR satellite and terminal programs.

Sincerely,

Frank B. Kelso II

Frank B. Kelso, II
Admiral, U.S. Navy

Honorable John W. Warner
Ranking Minority, Committee on Armed Services
United States Senate
Washington, D.C. 20510

THE JOINT STAFF
WASHINGTON, D.C. 20318-7000

JOINT REQUIREMENTS
OVERSIGHT COUNCIL

JROCM-025-90
23 March 1990

MEMORANDUM FOR THE DEPUTY SECRETARY OF DEFENSE

Subject: Requirements for MILSTAR

1. As requested, the Joint Requirements Oversight Council (JROC) has reviewed the requirements for MILSTAR and reconfirmed these with the CINCs and Services. The CINCs have reconfirmed their requirements for MILSTAR, as stated in current requirements documents*, and strongly support its deployment.

2. MILSTAR will assure connectivity through the entire spectrum of potential conflict. Extremely High Frequency (EHF) satellite communications, and MILSTAR in particular, appear to be the quickest, most cost-effective means to provide assured communications to highly mobile forces. At this time, no good alternative to MILSTAR exists to provide the necessary level of anti-jam, low probability of intercept, mobility, and survivability for US warfighting forces.

3. The JROC validates the requirement for MILSTAR and recommends that it be continued as the most important Command, Control and Communications program for the Department of Defense.

David E. Jeremiah

DAVID E. JEREMIAH
Vice Chairman
Joint Chiefs of Staff
Chairman, JROC

Reference:
* MJCS-114-89, 1 June 1989, Joint MILSTAR Communications, Control and Operations Concept (JMCCOC) Vol I, "System Description, Control, Management and Capabilities (1st Revision)" and MJCS-196-89, 10 August 1989, JMCCOC Vol II, "User Requirements (1st Revision)"

Copy to:
Under Secretary of Defense for Acquisition

UNITED STATES SPACE COMMAND
PETERSON AIR FORCE BASE, COLORADO 80914-5003

OFFICE OF THE COMMANDER IN CHIEF

10 July 1990

Honorable John Warner
United States Senate
Washington, D.C. 20510-4601

Dear Senator Warner

While I have not yet had the opportunity to testify before your committee, I wish to go on record as strongly supporting a full Milstar constellation deployment. I am concerned that reductions in the Milstar constellation will leave our Commanders in Chief (CINCs) a command and control system with insufficient coverage in important geographic areas for the positive control of conventional and nuclear forces.

Moreover, as we move to a smaller force structure designed to operate at all levels of conflict on increasingly diverse and complex battlefields, there is an enduring, if not increasing, need to provide our military and civilian leaders with a responsive, survivable command and control, communications and intelligence system that will assure worldwide connectivity to our tactical and strategic forces. Milstar is that system.

I urge your support in this critical issue.

Sincerely

DONALD J. KUTYNA
General, USAF
Commander in Chief

cc: The Honorable Sam Nunn
The Honorable J. James Exon
The Honorable Strom Thurmond

ADDITIONAL VIEWS OF MR. COHEN

The Senate Armed Services Committee has reported out the Defense Authorization Act for Fiscal Year 1991. While I voted to report the bill to the Senate, neither the majority's explanation of the Committee's recommendation nor the minority's additional views of the emerging threat environment and future U.S. national security requirement fully reflect my views.

The astonishing pace of political change in Eastern Europe has caused many conventional assumptions to crumble. While the sight of Soviet tanks rumbling through Vilnius reminds us that caution must remain the watchword when dealing with the Soviet Union, it is clear the defense budget can, and should, be reduced.

Any serious discussion of defense spending reductions, however, must start not with a dollar figure but an assessment of what military missions we will need to fulfill in the coming years given our international interests and commitments; what type of military force will accomplish those missions; and how to transform our present military force into one relevant to the future.

Since World War II, the military component of U.S. strategy has been to:

—Deter a nuclear attack upon our homeland;

—Prevent the Soviet domination of the Eurasian land mass;

—Project power into other regions and maintain access to distant markets and resources.

These basic objectives remain valid. What has changed is the extent to which military power will be needed to back up our goals and, equally important, the priority assigned to these three military missions. The collapse of the Warsaw Pact and Moscow's demonstrated desire for accommodation with the West mean that the first two missions can continue to be fulfilled with far smaller resources. The third mission, power projections, will require fewer resources in an absolute sense, but will become significantly more important.

Nuclear Deterrence: As long as nuclear weapons exist, we will need to deter their use. But we should forego programs we do not need, such as a B–2 bomber fleet, which, at a cost of over $100 billion to build and operate, could perform few functions that cannot be met with existing bombers and the new stealthy Advanced Cruise Missile. Moreover, we can reduce spending and enhance stability by promoting radical reductions and restructuring of nuclear forces, particularly in the most destabilizing type of weapon, multiple-warhead land-based missiles (MIRVed ICBMs).

Allied Defense: The depth and intensity of the institutional cooperation provided by NATO will enable the U.S. to make significant reductions in our forces deployed in Europe without creating the vacuum that would upset the ongoing European integration process—so long as these reductions are made in the context of negotiated arms treaties rather than mindless budget cutting. Current U.S. deployments of about four divisions and eight tactical air wings could be cut in half. Similarly, with the European scenario no longer dominating our planning, and warning time of Soviet aggression in Europe greatly enhanced, the Army's overall active duty component, currently 18 divisions, could eventually be reduced by nearly half, with steps taken to cushion the blow to personnel forced out of uniform as the committee has recommended. A wide variety of systems intended for use in the European theater, such as the Advanced Tactical Fighter ($65 billion), and the Lance follow-on missile should be eliminated. Programs with questionable justification, such as the LHX helicopter ($40 billion), should also be reviewed as prime candidates for cuts. However, measures should be taken to enhance our mobilization and sea-lift capabilities. U.S. forces remaining in Europe should emphasize providing logistical base and prepositioned equipment for any required reintroduction of U.S. forces, and allied forces should assume principal responsibility for heavy ground forces.

Force Projection: The one enduring fact of geography is that we are an island nation. Vital markets and resources are located across vast oceans and sea lines of communication are the main arteries through which our growing volume of trade flows. At the same time, our ability to station forces on foreign soil is increasingly hampered. Thus, the relative importance of naval and other force projection assets will grow significantly.

Our aircraft carrier fleet will play a critical role in our regional posture; but if current trends continue, the force could decline by possibly two carriers. Surface warships support our carriers and provide the visible presence required by the largely political peacetime function of our regional forces, necessitating continued modernization of our destroyers, which face block obsolescence. The Navy Advanced Tactical Fighter, however, should be deferred and existing aircraft relief upon instead. In contrast, the A-12 aircraft should proceed since alternatives cannot adequately fulfill its attack role.

With the need to replace and augment air lift capabilities, the Air Force's C-17 should proceed as outlined in the committee's report. The Army's scaled back active duty component should include highly ready airborne forces and special operations forces for regional contingencies. The division of labor with our NATO allies will allow the Army to focus on equipment that is lighter and more transportable. In general, such equipment would not have to be as heavily armored or have as much firepower as that required in Europe, although this statement must be tempered by the knowledge that increasingly sophisticated weaponry is being acquired by third-world nations. Special operation units are among the forces most likely to be used and their military and political value far outweighs their costs; accordingly, we should continue to increase our emphasis on their modernization, training, and plans for their use.

In short, conventional programs primarily designed to defeat Soviet aggression in Europe should be sacrificed in favor of those that will be needed to meet a variety of challenges that we are likely to face in other regions. The Committee has taken some important first steps to accomplish this goal.

WILLIAM S. COHEN.

ADDITIONAL VIEWS OF MR. McCAIN ON STRATEGY IN THE 1990'S

THE NEED FOR FUNDAMENTAL CHANGES IN STRATEGY AND ROLES AND MISSIONS

No one can deny that we face the most significant changes in our strategic position since the end of World War II. The cold war is not yet over, and the West must still meet the challenge posed by a growing Soviet nuclear threat and massive Soviet conventional forces. Nevertheless, the cold war grows warmer every day, and our strategic priorities have already changed. The need to deter a major conflict in Europe, the central focus of our strategy for the last 40 years, is no longer valid.

We must begin to make fundamental changes in our strategy, our force posture, and the roles and missions of each of our services. We must shift from a European and Soviet-oriented strategy and force posture to a global power projection strategy which emphasizes the continuing risks we face in Asia and the Third World. Europe must become only one of several strategic focuses.

The FY 1991 Defense Authorization Act makes an important step in this direction. It calls for the kind of improved strategic focus, planning, and budgeting, that is essential if we are to cut the defense budget, restructure our remaining forces, and preserve our national strategy.

It contains important provisions that I am proud to have helped develop, and which require that the Department of Defense submit its budget in mission form and provide an explanation of funding and capabilities the Department is seeking in each mission area over the next five years. It calls for greatly improved planning to preserve our industrial base. It calls for an expansion of the annual Joint Military Net Assessment to include a fundamental review of our strategic modernization plans, targeting, and arms control strategy. Equally important, it addresses the need to improve our planning of such critical power projection capabilities as our future carrier force and strategic mobility.

I am equally proud that the bill contains the Transition Plan that I developed with the Military Coalition to protect the men and women who now will be forced to leave military service. We cannot change our strategy, or cut our forces, without proper regard for the volunteers that helped to win the cold war, and long after the decisions we have taken regarding weapons systems are forgotten, people will remember how we treated our military personnel. I would also like to thank Senator Glenn for his support and help in transforming this transition plan into law.

MAKING STRATEGIC CHOICES: THE PATH WE NEED TO FOLLOW

The FY 1991 Defense Authorization Act is, however, only a prelude to shaping the new strategy, forces, and levels of defense spending we will need in the 1990s. There are many areas where it is not specific enough, or sets the wrong priorities.

First, we need a clearer strategic focus. Our future defense programs, budgets, and strategy should focus on global power projection for low to medium intensity wars, and shift decisively away from our past focus on high intensity conflict in Europe. This shift reflects both the rapidly changing realities in the USSR and Eastern Europe, and the continuing instability and threats in the Third World and Asia. Such an emphasis of power projection reflects the fact that less than 6% of our roughly 240 uses of military force since the end of World War II have involved direct confrontation with the USSR.

In conducting this strategy, we should focus on preserving our combat ready power projection forces and forward deployed forces. It is forward presence and comabt ready capability that deters, that helps limit conflicts, and meets most of our requirements. If we do need to build up forces for more than low or medium intensity conflicts, we will still need forces that are largely combat ready and which are tailored for global missions.

Our key power projection forces include our carrier forces, the Marine Corps, units like the Army's XVIIIth Corps, the tactical and conventional bomber forces of the Air Force, and the necessary strategic mobility. I fully recognize that such forces are not perfect and are not invulnerable. But, we are making major improvements in their capability, many in areas involving relatively low cost black programs. These forces already exist and their investment costs are already fully funded.

While it is fine to talk about radical changes and cuts in such forces, the end result of any radical changes is more likely to be precipitous "trade-downs" than effective "trade-offs". We cannot afford to make major cuts in the capabilities we need most.

RESTRUCTURING OUR RESERVES AND FORCES FOR EUROPE

Second, we need to redefine our role in the defense of Europe. While we must focus on a power projection strategy, we will need to retain a presence in Europe, and avoid any major force cuts until we negotiate CFE. After CFE, we should probably maintain at least a small corps and several tactical air wings. Further, we must be sure that our combat ready power projection forces can be deployed to Europe, as well as other regions of the world.

We can, however, make major cuts in those active and reserve forces, and lift and sustainability requirements, whose main purpose is to fight a major conventional war in Europe. These forces now constitute at least 25% of our conventional force structure. They are already "hollow forces" that we cannot properly make ready, deploy, equip, or sustain in less than several months to several years.

This is why we need to change the roles and missions of our reserve and National Guard forces as well as other active forces. The idea that we should emerge from CFR with enough active and reserve reinforcements in the U.S. to match a Soviet build-up, or fix the conventional balance is simply out of date. There no longer seems to be a threat that justifies such an effort, and it is clear that we are never going to fund the required forces and lift.

This is why we should not freeze our reserves, or rush to create more reserves. We owe the men and women in the National Guard and Reserves a role and mission the country really needs, and enough funds to provide for the proper training, equipment, and sustainability. We need to restructure our existing reserve forces to support global power projection, and provide forces tailored to tomorrow's contingency needs, not yesterday's.

Finally, we need to accept the fact that our European allies are not going to fund anything like the conventional force mix they now field, but that they must still assume a far greater responsibility for their own defense. Concepts such as structuring large number of heavy reinforcements for Europe are outdated and wasteful.

NUCLEAR FORCES AND ARMS CONTROL

Third, we need clear goals for revising our nuclear force posture. Our strategy should include both substantial modernization of our strategic forces, and focus on a clear concept for START 2 of START "1.5" that allows us to trade quality for quantity. We need both an affordable and a survivable force.

We can create the strategic forces we need by building 18 Tridents SSBNs, deploying at least one modern mobile ICBM, and focusing on bombers with cruise missile capability, rather than advanced penetrating capabilities. We also need to fund programs like MILSTAR, which are necessary to make smaller forces more survivable and more effective as retaliatory weapons.

We need to aggressively pursue arms control in a form that will allow us to use strategic modernization to create a more survivable force mix, and one which is less dependent on early escalation and launch under attack.

Our goal should be to emerge from each successive step in arms control negotiations with forces that are survivable and flexible enough to strengthen deterrence. We must simultaneously reduce the forces on both sides that create an incentive for first strikes, an escalation of tension, or dangerous behavior in a crisis.

By focusing on reduced, but modernized and less vulnerable nuclear forces, we can largely eliminate many land-based nuclear systems. We cannot, however, ignore the fact that we face a new threat from weapons of mass destruction. Proliferation is no longer a risk, but a reality. Our present arms control efforts necessarily focus on START and CFE, but we now face a very real risk of chemical and biological warfare in many parts of the Third World. We must do what we can to limit and stabilize the ongoing nuclear efforts of many Third World nations.

THE NEED TO CUT MILITARY SPENDING AND FORCES AT A PRUDENT PACE

If we pursue these strategy priorities, *if* the Soviet threat continues to diminish, and *if* we can seal the reduction in the Soviet and

Warsaw Pact threat with START and CFE agreements, we may well be able to cut our defense budget by as much as 25% or more over the next five to six years, and substantially reduce defense spending as a burden on the total federal budget and gross national product.

The FY 1991 Defense Authorization Act supports many of these strategic goals. However, many of the individual policy and funding decisions in the Act have been driven by budget pressures that have nothing to do with our nation's long term interests.

The present budget process, especially the pressures of Gramm-Rudman-Hollings, have often prevented us from focusing on our changing strategic needs or creating a stable and cost-effective path for cutting defense spending. Instead, we have had to focus on how we can cut outlays on manpower, operations and maintenance, and which big ticket programs can be cut so as to produce quick big ticket savings.

We must not continue to cut our forces on an annual basis as if there were no future, or to suit the day to day convenience of budget summits or short term political considerations. We need to act on a clear plan for properly phased cuts in our forces. We must plan for defense spending which takes account of the continuing uncertainties regarding Soviet plans, and the need to preserve critical power projection capabilities.

Above all, we cannot afford to rush forward to make cuts deeper than those already recommended in the FY 1991 Defense Authorization Act. Nearly 150 years ago, Napoleon wrote that, "When a nation is at war, the presence of a deliberative body is injurious and often fatal." Today, he might say the same thing about at nation at peace and the way we are letting the budget process affect our national security.

Far too many people only look at the defense budget to find what they can cut, regardless of its strategic impact, and suggest that we make further cuts on the basis of finding the program that presents the least political resistance.

The fact remains, however, that the analysis in the report language of the Defense Authorization Act clearly shows that the U.S. cannot afford the strategic consequences of cutting the defense budget to the Senate and House Budget Committee levels, much less the kind of cuts that would come later this year if we faced a sequestration of $50 to $80 billion.

It is one thing to cut defense outlays this year by 5 to 6% in real terms, and to cut defense authorization in anticipation of futher long term cuts. It is another to suddenly slash 9-13% from outlays in one year. We would destroy our all-volunteer manpower base, our defense industrial base, and the operations and maintenance that shapes our readiness and sustainability.

In summary, we need to cut defense spending at a pace that allows us to decide on a new strategy. It must be done within a time frame that allows us to restructure the roles and missions of our forces, and our major procurement programs in a cost-effective manner. We need to cut defense spending at a pace that allows us to finish START and CFE, to establish some new security structure in Europe, and to observe the path the USSR will take long enough to be certain as to the future structure of its military capabilities.

JOHN MCCAIN.

ADDITIONAL VIEWS OF MR. WALLOP

I join the Minority in dissenting from the Committee's actions to cancel, delay, or reduce defense programs which are vital to the nation's security, particularly strategic and space programs. But my concern goes beyond decisions on specific programs. I am particularly troubled by the absence of a serious military rationale in the markup process, or in the Committee Bill that emerged from the markup. In deciding on major defense programs and funding levels, the Majority voted with minimal reference to specific threats, strategic imperatives, or military requirements.

For example, the Committee professed to act in keeping with several broad themes, the foremost of which is to "maintain nuclear deterrence at lower levels and with greater stability." This is a worthy theme and indeed a necessary national security goal. Yet most of the actions taken by the Majority paid little heed to this vital proposition. The most notable is the decision to terminate the MILSTAR program which would provide command, control, and communications to our strategic forces. Improved, survivable C 3 is essential to maintain the reliability of our nuclear forces and the stability of deterrence, and yet the Committee cancelled MILSTAR without considering the military consequences.

In short, the Committee offered or entertained few arguments regarding the strategic impact of cancelling or delaying major programs, or of large, unilateral cuts in U.S. force levels. Nor did the Committee consider any alternatives to some of its drastic decisions. While I thoroughly understand the great pressures on the Committee to find major cost savings in the Defense Budget, I regret that the markup debate was in essence an exercise in accounting rather than an exercise in sound defense policy analysis posturing demonstrated needs and capabilities against national budget requirements.

MACOLM WALLOP.